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SPRING 2009



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OUR COVERS: Photos by MC2 John W. Ciccarelli Jr. For more information about the MUOS program, see pages 26-28.



Commander, Naval Network Warfare Command  
VADM H. Denby Starling II

Vice Commander  
RADM Edward H. Deets III

Deputy Commander  
Mr. Terry Halvorsen

Public Affairs Officer  
LCDR Doug Gabos

Editor  
Mr. George D. Bieber

Associate  
MC2(SW/AW) Justin L. Ailes

Visual Information Specialist  
Mr. Robin D. Hicks

Production  
Quintessential Color Group  
Upper Marlboro, MD

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EDITOR'S NOTE: CAPT James Hagy, commanding officer of NIOC Hawaii, stands in the belly of the Kunia tunnel located on Schofield Barracks, Hawaii and home of NIOC Hawaii. See pages 4 & 5 for an interview with Hagy.

Photo by CTR3 Jai Pellerin, NIOC Hawaii



Aloha, I am CAPT Jim Hagy, the commanding officer of Navy Information Operations Command (NIOC), Hawaii. Our command is the single largest Navy shore command in Hawaii but do not let the term “shore command” fool you. The NIOC Hawaii team consists of more than 1,375 Sailors, and approximately 400 deploy every year in support of COMPACFLT, C7F, C3F, and Countering Violent Extremism (CVE) in places like Iraq, Afghanistan and Djibouti. The remainder of our Sailors are actively engaged in supporting fleet and national customers 24 hours a day, seven days a week in various roles from security to intelligence analysis.

As the CO of this great command, I am responsible to VADM Starling for the ultimate task of ensuring war fighters and their commanders have accurate, timely and secure information when they need it, in order to execute decisions in an increasingly fast-paced, network-dependent battle space. In executing that mission, NIOC Hawaii is committed to supporting our Nation’s priority to counter violent extremism by rapidly responding to all operational requirements when called upon. It is my imperative to maintain the highest state of operational and war fighting readiness to ensure victory in combat or serve as a deterrent in peace. All NIOC Hawaii Sailors will be prepared to sail into harm’s way when our nation calls. The support NIOC Hawaii provides to the National Security Agency/Central Security Service (NSA/CSS) Hawaii, PACOM, PACFLT and CC7F is our number one operational goal.

*What would you consider is in store for the IW Community?*

The IW community has the challenge and opportunity to define, recruit, train and sustain the Navy’s Cyber force of the future. We are already making significant progress in this area as the world and technology continue to change. I am confident the IW community will be successful in defining the Navy’s Cyber Strategy and Computer Network Operations will get us there. Our traditional roles in Signals Intelligence will remain our core competency.

*How do you feel your previous duty as the Senior IW Detailer prepared you for command?*

In general terms, every assignment I have had has prepared me for this job. Being a commanding officer requires the combined experiences of a Navy career. The senior detailer position provided me with a personal understanding of the Navy personnel management system and distribution of personnel across the globe. I was simultaneously exercising the role as IW Officer Community Manager, working with community leadership to guide and manage the

community to meet current as well as future challenges. I was fortunate to have access and see it all, to understand the process in its entirety.

*We hear rumors of a merger between the IW and Intel communities. Is there truth behind this?*

As far as I know there are no plans to merge the IW and Intel communities at this time. Such rumors may have been fueled by the merger of IW and Intel staffs on fleet staffs, but that was more a function of the staff’s decision to manage their resources rather than any Navy-wide initiative.

*As a shore duty command many think you only play a shore based role in the IW community, how would you respond to this?*

NIOC Hawaii also has a mission to deploy IW personnel and capabilities to support COMPACTFLT, C7F and C3F. NIOC Hawaii annually deploys more than 400 Sailors, not including IA support. The command’s Fleet Information Operations Center (FIOC) also provides direct service and reach back support to deployed war fighters. NIOC Hawaii supports fleet and national customers while at the same time fulfilling the role of host to NSA Hawaii. All three roles are equally important and we balance our time, energy and resources accordingly.

*NIOC Hawaii will be moving to a new building soon. How is this going to improve your ability to accomplish your mission?*

The transition to the new building in Wahiawa provides both challenges and opportunities in the next few years. As we transition to Wahiawa it is important that we collectively focus to ensure the existing levels of support are maintained for fleet and national customers. This challenge must be carefully managed.

At the end of my command tour, I will have a sense of accomplishment if NIOC Hawaii has increased the readiness of the command and the fleet while we successfully transfer into the new building.

The working relationship of FIOC with the Joint team cannot be lost. The collaboration with the service commanders and NSA Hawaii leadership team is a noteworthy success that must be maintained. NIOC Hawaii’s success is the result of close, collaborative working relationships that benefit both the fleet and national customers. Additionally, Sailors are our greatest and most valuable asset and their continued training and development must remain a priority. The command will only succeed if we have a well-trained and well-led, motivated Sailors -- all this will be achieved by actively taking care of our Sailors and their families. When we accomplish these goals we all win. 🇺🇸

## AT A **GLANCE**

CAPT Hagy was born in Evansville, IN, and raised in rural Virginia. He enlisted in 1974 and attended Cryptologic Technician Collection “A” School at Corry Station, Pensacola, FL, graduating in 1975. His assignments include duty at Naval Security Group Activities in Japan, Guam, Spain, Illinois and Virginia. He was promoted to Chief Petty Officer in 1986 while deployed aboard USS IOWA (BB 61).

Hagy was commissioned in 1987 and his first assignment was NSGA Galeta Island, republic of Panama. He was assigned to USS ARTHUR W. RADFORD (DD 968) as Electronic Warfare Officer from 1990 to 1992, and participated in the Personnel Exchange Program with the Royal Australian Navy in New South Wales, Australia, from 1993 to 1995.

Hagy reported to Naval Technical Training Center Pensacola, FL in 1995 and served as Division Officer for the CTR A and C Schools Division until 1998. He was then assigned to Commander, Amphibious Task Force Cryptologic Resource Coordinator until 2000, and assumed duties as Officer-in-Charge U.S. Naval Detachment Combined Support Group Alice Springs, Australia until 2002. Hagy was assigned to the staff of Commander, U.S. Fleet Forces Command Norfolk, VA, as deputy director for Naval Security Group Atlantic until 2005. His last assignment was Navy Personnel Command as Information Warfare Officer Community Manager, Senior Placement Officer, and Detailer for Navy Information Warfare Officers.

He assumed command of NIOC Hawaii in July 2008. 🇺🇸



## **FORCE CHAPLAIN's** Thoughts

New York City Mayor Michael Bloomberg referred to U.S. Airways pilot, Captain Chesley Sullenberger’s ditching of an Airbus A320 in the Hudson River as the “Miracle on the Hudson.” And what a feat it was! Because of that one act, Sullenberger will now be most remembered for what he did on Jan. 15, the day he landed a commercial airliner in the water and all 155 passengers and crew survived with no fatalities or major injuries.

But it is not just what Sully did on that one day that made the Miracle on the Hudson possible. It is what he did day-after-day over his lifetime that put him in a position to accomplish what no one else had ever done in 50 years of commercial airline history—ditch an airliner in the water and have all of the passengers live to tell about it.

If you review Sulley’s resume, you’d see that he is a U.S. Air Force Academy graduate, a recipient of the Outstanding Cadet in Airmanship Award in 1973, a former F-4 fighter pilot, an airline safety expert who founded the company Safety Reliability Methods, and a pilot with 40 years of experience. Speaking about her husband, Lorrie Sullenberger said, “He is about performing that airplane to the exact precision to which it is made.”

From this story we are reminded that we largely achieve what we do in life not because of a single act of greatness, but because of countless small acts that are consistently performed over a lifetime. It is the “little” acts we perform day-in and day-out that primarily define who we are. Each of these small steps builds upon one another. So, if you aspire to greatness, then work on the “little” things every day that demonstrate your discipline, determination and commitment, and in so doing you will lay the foundation of greatness. 🇺🇸

May God Bless,

George Adams  
CAPT USN

**EDITOR’S NOTE:** Pictured opposite CAPT George Adams is the Domain’s Force Chief Religious Programs Specialist Eugene A. Trinidad. Trinidad is a native of Corozal, Puerto Rico and served with the Multi-National Corps, Iraq prior to receiving orders to NETWARCOM.



# NAVAL NETWORK WARFARE COMMAND COMMANDER'S GUIDANCE FOR 2009

Let me begin by expressing my profound appreciation for the efforts each of you put forward in 2008. As I travelled the domain over the course of the year, I NEVER ceased to be impressed by the quality, focus, determination and dedication of the Sailors and Civilians of our Force. You really are a tremendous Team and I am truly excited about the great things I know you will do in 2009.

You will not find this year's guidance differs markedly from that of 2008. Our Strategic Plan remains sound. The high level priorities I set for NETWARCOM have not changed. We have the right sight picture and are heading in the right direction. My aim for the 2009 guidance is to refine our approach to accomplishing those goals.

For the Headquarters, 2008 was a year marked by significant organizational change. We established the Readiness and Training Directorate to enable our activities as the Navy's Type Commander for C4I. We stood up the Fleet Intelligence Office as our initial step in assuming duties as the Type Commander for Fleet Intelligence. We established the NGEN Fleet Integration and Transition Team to guide Fleet transition activities as we approach the October 2010 expiration of the NMCI contract. We took foundational steps to establish a Fleet Electronic Warfare Center. We matured our delivery of specialized space training and direct Fleet space support to deployed maritime forces. These actions were critical in facilitating NETWARCOM's continuing journey from our genesis as a network and communications provider to our future as Navy's and DoD's premier Cyber Force.

In 2009, I anticipate greater focus on Cyber; nationally, within DoD and within Navy. Cyberspace has been defined as "a global domain within the information environment

consisting of the interdependent network of information technology infrastructures, including the Internet, tele-communications networks, computer systems and embedded processors and controllers." This description fits our domain to perfection. NETWARCOM has always been a leader in Cyber and is the DoD's premier service cyber-focused organization. NETWARCOM is the DoD EA for Computer Network Operations training. Navy was the first service with an enlisted rating dedicated to Computer Network Operations (CTN). Navy Cyber Defense Operations Command is the first and currently the only Level III certified Computer Network Defense Service Provider in DoD. While the operation and defense of Navy's networks is increasingly critical, our mission is more expansive. NETWARCOM is charged with

*"In 2009, I anticipate greater focus on Cyber, nationally, within DoD and within the Navy."*

delivering cyber forces and capabilities to the warfighter to enable them to execute operations, accomplish their mission and truly deliver effects to achieve decision superiority.

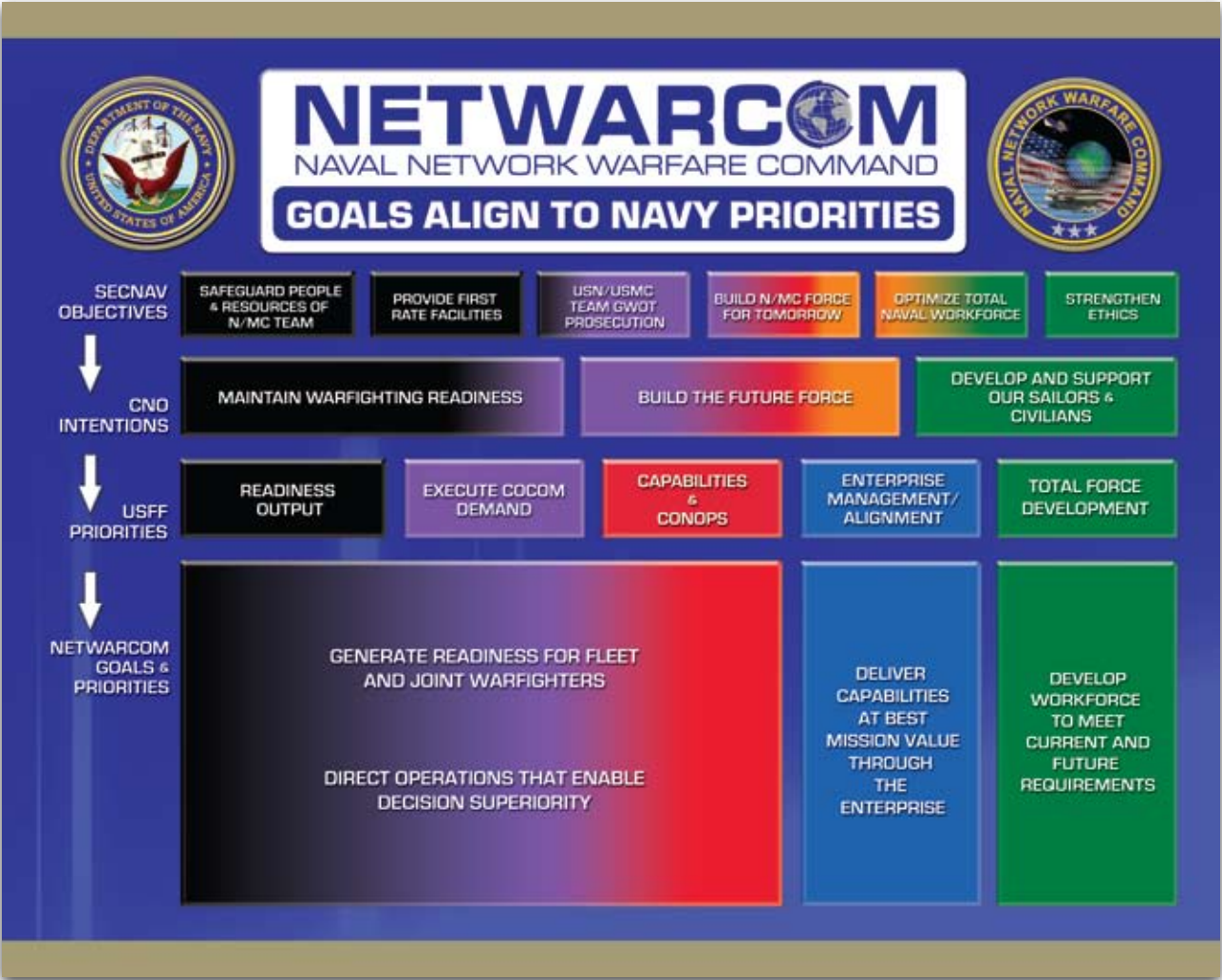
Today, NETWARCOM is DoD's only command that combines in a single organization all of the skills necessary to operate across the Cyber domain. The current NETWARCOM mission set, with responsibilities in ALL aspects of IO, including CNO and Information Assurance, already mirrors the mission sets being examined for inclusion in a DoD-level Cyber command. NETWARCOM is operationally aligned to those organizations that execute DoD-level Cyber functions (STRATCOM, NSA/JFCC NW, DISA/JTF GNO) and is organized to

respond for Navy when called on. EVERY NETWARCOM subordinate command contributes uniquely to our Cyber mission. As Cyber becomes an ever more increasing part of our military lexicon, those of us who work in the NETWARCOM domain must begin to think of ourselves not as communicators, cryptologists, intelligence officers, space cadre, or in terms of our RL/URL communities, but as Cyber professionals, a blended Team that delivers fleet readiness and operational capability in Cyberspace.

## Priorities for 2009

**1. Generate Readiness for the Fleet and Joint Warfighters**  
Fleet readiness remains our primary deliverable. We made great strides this year in reinforcing NETWARCOM's position as the organization responsible for delivering Fleet C4I readiness. We conducted our first Strike Group assessments of basic phase training readiness and teamed with CSFTL to play a greater role in the evaluation of integrated training. We must build on this foundational work in 2009, expand our activities to include PAC and independent deployers, build more capacity to deliver training in shipboard CND/IA and expand our platform-centric approach to readiness into our NCTAMs and NIOCs ashore. In 2008, we produced our first metrics dashboards for NETOPS and IO Readiness. Refinement of these metrics into "metrics that matter" will continue. In 2009, we will accelerate our ability to understand and measure the elements of Cyber readiness. Specifically, we must:

- Build a holistic readiness picture for Navy networks afloat and ashore
- Continue to mature the metrics defining IO Readiness



- Continue to mature our space readiness metrics and refine our space support portfolio to reflect operational lessons learned from deployed Strike Groups
- Continue our efforts in legacy network reduction through CARs
- Improve our ability to self-assess
- Develop readiness portfolios for Fleet intelligence, Electronic Warfare, and critical Cyber personnel skills, such as language.

**2. Direct/Execute Operations that Enable Decision Superiority**  
Events of 2008 confirmed that centralized planning and direction with efficient decentralized execution is a requirement for operational success in Cyberspace. Those same events demonstrated that we have much work to do operationalizing NETOPS within Navy. Last year's guidance to align our functionality remains valid...perform common

functions the same way, regardless of geographic location. Specifically we must:

- Work to resolve existing weaknesses in doctrine and NETOPS C2
- Codify our vision of functionality in the NETWARCOM MOC
- Extend our NETOPS C2 operational model into traditionally non-operational organizations whose networks represent potential areas of vulnerability
- Publish the Fleet Space CONOPS, providing guidance to maritime forces on the effective integration of space effects
- Interact closely with Fleet N-6's and Echelon II CIOs

Facile change of INFOCON levels is no longer an exercise, but an operational imperative. Expect

increased demand signal from our operational commanders for greater visibility and influence in the operational status of their local networks while Navy leadership will demand that we execute the same function across all Navy networks.

We are the Navy's experts in the delivery of non-kinetic effects. I expect you to work closely with your Navy and Joint customers to understand and meet their operational needs. In areas where their desires may compete or conflict with current doctrine or procedure, let us know so we can help you. We are still learning here and "outside the box" thinking should be welcomed. Operational accountability and excellence in operations should be the norm, do not accept less.

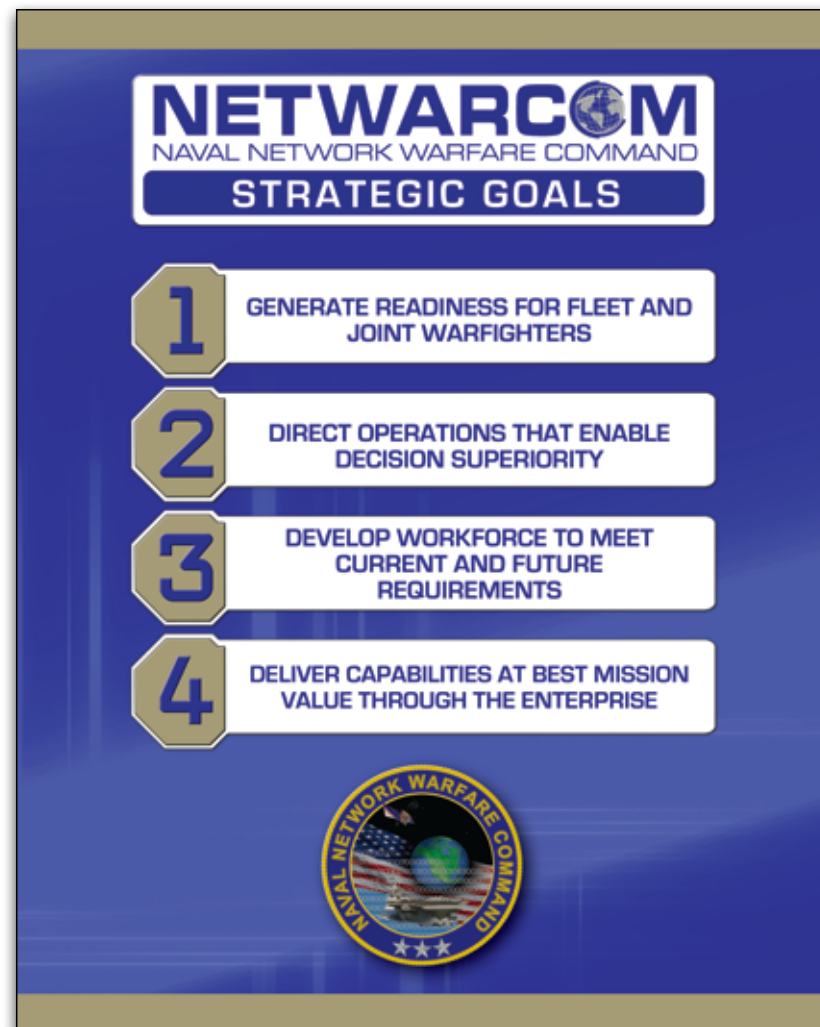
**3. Develop the Workforce to Meet Current and Future Requirements**  
NETWARCOM is blessed with



a military and civilian workforce whose technical and leadership skills are second to none. These skills make them equally valuable outside Navy. With such valuable assets at stake, developing and retaining quality individuals should continue to be your top priority. I expect you to have a clear view of your organization's diversity posture, retention trends and an understanding of what is driving them. Know and use your respective forums to communicate your observations so that we can engage on issues which have Navy wide implications. While we have made great strides in alleviating manning shortages in critical areas, many of you remain understaffed with a growing demand signal. Be attentive to what is reasonably executable. Quality manpower metrics are key to helping us define our capacity. A diverse military and civilian workforce is crucial to our future as a Navy. To excel to that end, your participation in efforts to eliminate low representation rates at all levels of the organization are paramount to the success of NETWARCOM, DoN and DoD. You should look for opportunities to support diversity efforts, both internal and external to DoD. Your actions will speak louder than your words. In 2009 we will continue to refine our "Employer of Choice" program, reinforce our mentorship efforts, work with OPNAV on the NGEN workforce and "IT of the Future" programs, press for a better Navy-wide "fit" of our valuable space cadre, and develop

Intelligence manpower metrics for the Fleet. Navy Core Values and our Navy Ethos are guiding principles that should figure prominently in your command.

4. Deliver Capability at Best Mission Value Through the Enterprise
- Naval Network FORCENet Enterprise activity increased in 2008. Our metrics matured, programmatic and cost came under greater scrutiny,



and we signed a performance agreement with Navy Total Force for personnel readiness. While much of this activity takes place at the HQ level, I expect you to take an Enterprise approach to day-to-day activities in your command. Manage with metrics; understand your processes; look for efficiencies that make sense while always putting

mission accomplishment first. None of you will have all of the resources you need to do all that we will ask of you. You must have a coherent way to prioritize and Enterprise thinking is perfectly suited to help you make intelligent choices.

Expectations:

They have not changed from 2008 and I quote them here for you again:

- **First and foremost-view yourself as a warfighter**
- **Set high expectations... for yourselves and your workforce**
- **Ask yourself every day how to improve Fleet readiness**
- **Take care of your workforce**
- **Don't forget the basics... train...train... train**

2009 will present great challenges and even greater opportunities. We start our year at a higher state of network readiness. A new administration assumes the reins; it is unclear how this will impact our strategic priorities. Our economy is in crisis, which may reduce the resources available to us to execute. But execute we will, efficiently and effectively. Our mission remains vital. We provide the Cyber capabilities that make Command and Control possible. Decision Superiority rests with us.

# NETWARCOM Releases Revised Strategic Plan

By Kathleen Martin, Business Integration Group

Naval Network Warfare Command recently released an updated Strategic Plan (2009 -2013) that clarifies and refines the command's goals and priorities. While the overall priorities of the command have remained sound, the command mission continues to evolve and expand, and the Strategic Plan must also adjust.

In his 2009 Commander's Guidance, VADM H. Denby Starling II, commander, NETWARCOM, made note of the significant initiatives of 2008: establishing the Readiness and Training Directorate, the Fleet Intelligence Office, and the NGEN Fleet Integration Transition Team. Starling said each was a necessary step in solidifying NETWARCOM's future as the Navy's premier Cyber Force.

The revised Strategic Plan aligns more closely with the Chief of Naval Operations' Guidance and U.S. Fleet Forces Command priorities, and revised our goals from six to four. The new goals more clearly reflect the commander's intent, and combine with the mission and vision statement to reflect why NETWARCOM exists and what the command intends to achieve. This plan establishes a structure that drives leadership clarity and alignment throughout the command.

This Strategic Plan, aligned with the Commander's Guidance, outlines where the command wants to go and provides a roadmap to get there. It refines the approach to achieving the goals and adds measures to track performance and achievement.

"Our Strategic Plan will keep us focused on our goals, and it ensures we have the right measures in place to continually evaluate our progress," said Michael Jones, NETWARCOM's director of Strategic Planning.

Metrics play a critical role in the Strategic Plan as a part of the measures of performance. Fundamental to organizational improvement, performance measurement provides a way to monitor the progress and achievement of Strategic Plan goals and objectives.

"In 2008, we produced our first metrics dashboard for NETOPS and IO Readiness," said Starling in his 2009 Guidance. "Refinement of these metrics into 'metrics that matter' will continue. In 2009, we will accelerate our ability to understand and measure the elements of cyber readiness."

The Strategic Plan is a working document and remains flexible. The plan reflects what we should do and not just on those things we are resourced to do. This plan parallels the work being done every day, and all employees should be able to visibly align the work they do to the plan.

It is important for everyone to read and become familiar with this document so there is a clear understanding of the context of NETWARCOM's direction and priorities over the next five years. The entire Strategic Plan can be found at <http://www.netwarcom.navy.mil>.



## Digital Signatures Now a Requirement

By MC2(SW) Christopher J. Koons

In today's often dangerous cyberspace environment, whether or not an official e-mail is valid or harmful is knowledge everyone needs to have. To this end, the Department of Defense has implemented a policy requiring its employees to digitally sign all e-mails they send out having a link or attachment.

A digital signature is also required for any e-mail that provides direction or tasking, requests or responds to requests for resources, promulgates organization position, discusses any operational matter, discusses contract or finance matters, or discusses personnel management matters. The need exists to ensure that the originator is the actual author and that the e-mail was not tampered with in transit.

The policy, which was updated for the Navy in September 2008, applies to all unclassified e-mail sent from a DoD-owned, operated or controlled system or account to include desktops, laptops and personal electronic devices such as BlackBerrys.

A recent example of the importance of being able to verify trustworthy sources occurred as a phishing scam. It came in the form of an unsigned e-mail that targeted navy.mil users. This e-mail requested that recipients update their account information and threatened e-mail shut down for users who did not comply. This should serve as a reminder to be aware of any electronic requests for personal information such as date of birth and passwords. Additionally, a digital signature should have been affixed so the source could be verified.

"It ensures that the information from links and attachments comes from a trustworthy source," said LCDR Damen Hofheinz, NETWARCOM's deputy for Information Assurance. "For example, if an e-mail contains a link, you need to know that it leads you to a valid web site."

A digital signature is a "stamp" on an e-mail, which is unique to the user and provides an accurate means of identifying the originator of a message. Its tool bar icon

is an envelope with a red seal on top. A digital signature assures the recipient that the original content of the message or document is unchanged. It also provides the sender with proof of delivery, and the recipient with proof of the sender's identity and reassurance that the e-mail's originator is its actual author.

Some e-mails require added protection in the form of the "Encryption" key, which, like the Digital Signature key, has an envelope icon but has a blue lock rather than red seal on it. Navy policy requires encryption of all e-mails that contain Privacy Act Information, Health Insurance Portability and Accountability Act Information, contract information, classified as FOUO or that may serve as an OPSEC indicator.

"If you send an e-mail which contains Personally Identifiable Information (PII) such as your social security number or if the message is For Official Use Only, you need to encrypt as well as digitally sign it," Hofheinz said. "Encryption provides an extra level of protection."

Encrypting e-mail is made much easier when personnel publish their certificates to the Global Address List (GAL). This can be accomplished in Outlook by opening the "Tools" menu then selecting "Options." On the "Security" tab there is a "Publish to GAL" button. Clicking on this button will ensure that other users on the network can send encrypted e-mail back to the originator.

OCNUS Navy Enterprise Network (ONE-NET) has already implemented a network policy for all e-mails to be digitally signed and NMCI started implementation on Feb. 12, 2009. Users will have to deselect the digitally signed button in Outlook to send unsigned e-mails. "It is one part of our overall Public Key Infrastructure (PKI) implementation, which is designed to prevent bad guys from accessing information we send over the Internet," said Hofheinz.

For more information on the military's digital signature/encryption policy, go to <https://www.infosec.navy.mil/PKI>.

and the growth in interconnected computer systems, the threats to information technology have become more sophisticated and diverse," said Moffett. "Anti-virus software is a tool we use in order to combat system vulnerability to malicious attacks."

"The INFOSEC web site has a large variety of tools to gain knowledge on how to use anti-virus software and offers advice on how to deal with virus risks," said Moffett. "It also has descriptions of policies

on how to protect DoD equipment and information. The other branches of the armed forces also have sites that offer these resources."

Members can either download via file transfer protocol (fast connection) or go to the INFOSEC FAQ page for slower downloads, then choose the software. Anti-virus software from McAfee is available, in addition to Symantec and TrendMicro, plus regular signature updates to keep PC workstations current.

Mac users can download McAfee Virex software and signatures for OS X, as well as earlier Mac operating systems. The sites even offer VirusScan for UNIX and DOS users.

"You should keep the software in a secure place such as your external hard drive or your local drive," said Moffett.

To obtain anti-virus software, members should go to <https://www.infosec.navy.mil>, and click on "Anti-Virus Information."



## Navy COOL Approaches 5,000 Funded Certification Exams

From Navy COOL,  
CID Corry Station Public Affairs

**PENSACOLA, FL** -- The Navy Credentialing Opportunities On-Line (COOL) Web site has made it easier than ever to search for credentials related to a Sailor's rating, job and/or occupation.

Headquartered at the Center for Information Dominance (CID) Corry Station, the Navy COOL Web site – <https://www.cool.navy.mil> – contains a significant amount of information. The site has virtually all the links necessary for certification programs for active duty Sailors.

Using Navy COOL is easy and many Sailors have already taken advantage of the great program.

To date, more than 4,400 certification exams have been funded for active-duty Sailors and 171 certification

exams have been funded for Reservists.

According to officials, these Sailors passed their certifications with a 96 percent pass rate. This number far exceeds the national average pass rate, which is estimated to be between 70-85 percent.

In addition to providing updated information for Sailors who are seeking to enhance their careers, Navy COOL has additional links to educational resources like the Navy Advancement Center and the Navy College Program. The Navy COOL Overview page is extremely helpful to navigate through the Web site.

"I've been in the Navy for more than 24 years and I am really excited about the Navy's proactive move to prepare Sailors personally and professionally through the Navy COOL Program," said CTRCS(SW) Patricia L. Davis, CID Cryptologic Technician Collection model manager. "This program allows Sailors to develop themselves while on active duty and prepare themselves for life after the Navy, a civilian job. The Navy COOL Web site explains how Navy Sailors can get information about civilian equivalent licenses and certifications relevant to their Navy job. It's really all about education, education, education."

Navy COOL provides an additional tool that makes life even easier for Sailors with limited Internet connectivity - download Navy COOL "To Go" on Navy COOL at <https://www.cool.navy.mil>. This enables a Sailor to copy the program to a CD, and peruse the program on any workstation, with or without Internet access.

In addition to the Navy COOL Web site and program being a great tool for Sailors to enhance their career, Navy recruiters and Sailors who wish to cross-rate to another rating due to merger or disestablishment can now get a head start on obtaining certifications for their new rating or job.

Navy COOL personnel are standing by to assist Sailors on their certification quest and answer any questions they may have about the program. Representatives for all the ratings are available to answer questions and help get vouchers approved through a relatively simple, streamlined process.

"As a senior leader, I encourage all Sailors to take advantage of the opportunities that the Navy COOL program offers," Davis said. "Check out the Navy COOL Web page today."

## Free Anti-Virus Software Available to DoD Employees

By MC2(SW) Christopher J. Koons

As cyberspace has become an increasingly active battlefield for the United States military, the need for effective anti-virus programs has grown.

Anti-virus software is found on every Department of Defense computer to fight against common threats that often spread via e-mail and the internet. DoD employees are vulnerable at work, and because

many people bring work home, their home computers require protection to ensure that malicious files are not inadvertently transferred from an unprotected home system. To that end, several government web sites offer free anti-virus software intended for use on service members' home computers.

The software is licensed for DoD employees, both military and civilian,

courtesy of the Defense Information Systems Agency (DISA). According to IST1(SW/AW) Angela Moffett, leading petty officer for Navy Cyber Defense Operations Command's (NCDOC) infrastructure department, recent cyber attacks have highlighted the importance of having this software available to DoD members.

"Because of the security challenges the Navy is currently experiencing



(Left to right) Court members; Rob Mawhinney, Marianne Chalut, Richard Voter and George Alves, discuss implementation of information assurance capabilities and services. (Photo by MC2 Adrian White)



## NETWARCOM Process Improvement Team Receives Navy IM/IT Excellence Award

By Darlene Goodwin

The Naval Network Warfare Command Certification and Accreditation Lean Six Sigma Project team recently received the Department of the Navy (DON) Excellence Award for Information Management and Information Technology (IM/IT), at the DON IM/IT Conference held in San Diego in February.

The award is presented annually to teams and individuals from the Department of the Navy who exemplify excellence in the IM/IT field. Five teams and three individuals were selected to receive the 2009 award.

"This year we received many outstanding nominations that highlight the fantastic work being done throughout the Department of the Navy," said DON Chief Information Officer Robert J. Carey. "The quality of nominations made it hard to choose, and each nominee is to be commended for their outstanding contributions

to furthering the mission through the use of innovative information technology."

The NETWARCOM team also included members from NETWARCOM, Space and Naval Warfare Systems command (SPAWAR), DON CIO, and several senior Navy CIO staffs.

According to Richard Voter, director of the Navy Operational Designated Approval Authority (ODAA) at NETWARCOM, the goal of the project was to better support operational commanders by reducing the length of time that it takes to achieve authority to operate new IT systems. The team produced a 60 percent reduction in the cycle time for processing accreditation packages.

"Using Lean Six Sigma techniques, the team made significant contributions to the efficiency and effectiveness of the Navy's process for managing the implementation of information assurance capabilities and services," Voter said. "The

key enabler for our success was the creation of teams that collaborate on the review and processing of each request. The use of collaboration eliminated the wasteful steps of reviewers checking reviewers, and also resulted in quicker reviews, more operational focus, and higher quality accreditation decisions."

Katie Petrillo, NETWARCOM's business analysis director who leads the Continuous Process Improvement program for the command, said the Navy Certification and Accreditation Lean Six Sigma project is a great success story.

"It demonstrates how deliberate efforts to improve processes across organizations can not only improve the process but can also build a stronger team to support operations across the Navy," Petrillo said. "All the parties involved in the process improvement effort have made great strides in focusing on supporting the customer while maintaining the right level of operational risk."

## NIOC Texas Sailor Leaves His Mark in Iraq

From NIOC Texas Public Affairs

NIOC Texas' own CTT3(EW) Nathan Thibodeau recently returned from an 8-month Individual Augmentee (IA) deployment in Iraq.

The Bradenton, FL, native attended the Cryptologic Technician Technical "A" School in Pensacola, FL, before his assignment to the Navy Expeditionary Intelligence Command (NEIC) detachment, NIOC Texas.

Thibodeau was one of the first NEIC analysts to deploy in support of a Marine combat mission, setting a standard of excellence for his shipmates to follow.

While deployed, he conducted a comprehensive radio frequency study of activity occurring on and around Lake Tharthar. This study provided valuable force protection and early warning information to the leadership of the operational boat detachment he was assigned to.

He also managed a complex operational communications suite while supporting Riverine boat detachments, Unmanned Aerial Vehicles (UAVs), and other Marine Corps assets covering more than 1,000 square miles in a hostile enemy environment.

Thibodeau is looking forward to his next deployment with RIVRON Three in 2009. As a follow up tour, he hopes to be a part of the Naval Special Warfare program.

**EDITOR'S NOTE:** NEIC's mission is highly versatile. It provides adaptive intelligence capability and capacity through the provision, support and sustainment of a standing force of ready expeditionary intelligence personnel. NEIC is fully task-organized, manned, trained and equipped to support COMNECC operating forces and respective theater Naval Component Commanders/Joint Force Maritime Component Commanders.

Official U.S. Navy Photo





# Navy IT's Adapt to Changing World, Support Maritime Strategy

Story by Gary Nichols, CID Corry Station, Public Affairs

Photo Illustration by Robin D. Hicks

When the Navy shot down a non-functioning satellite last year, an information systems technician (IT) didn't "push the button," but an IT did provide the critical data and the managed communications links required to execute the mission.

Each day throughout the fleet, commanding officers and other naval leaders make important decisions that affect not only the lives and welfare of Sailors in their command, but the lives and welfare of many Americans. ITs don't gather and analyze the data these leaders employ to make their decisions; they ensure the critical data and timely communications key decision-makers rely on remain secure and open.

IT training typically begins shortly after a Sailor completes boot camp. They report to Pensacola for 11 weeks of intensive "A" school training at the Center for Information Dominance, Corry Station, where they learn numerous technical skills.

The new ITs learn about designing, installing, operating and maintaining state-of-the-art information systems including local and wide-area networks, mainframe, mini and microcomputer systems and associated peripheral devices; writing programs to handle the collection, manipulation and distribution of data for a wide variety of applications and requirements; performing the functions of a computer system analyst; operating and coordinating telecommunications systems including automated networks and the full spectrum of data links and circuits; transmitting, receiving, operating, monitoring, controlling and processing all forms of telecommunications through various transmission media including global networks; applying diagnostic, corrective and recovery techniques to all facets of the integrated information systems; maintaining all necessary logs, files and publications at the communications center; and providing telecommunications and computer-related training and assistance to a wide variety of personnel.

"CID is exceptionally proud of helping Sailors execute the CNO's maritime strategy," said CID Corry Station Training Directorate Head Chuck Sauter. "CID prepares our Sailors to help achieve the imperatives of the maritime strategy. Our focus is building the future force and developing training paths for an IT's career."

The IT rating is one of the most diverse ratings in the Navy. The skills ITs master are vastly different from the technology used by Sailors from past generations.

"I have seen this rate evolved to what it is today," CID Corry Station IT "A" school Instructor Eric L. Alexander said. "Communication is the future, and whoever controls communications can control how battles are fought and won."

The IT rating resulted in a 1997 merger of two previous ratings: data processing technician (DP) and radioman (RM). The blending of computer technology and radio communications resulted in the new IT rating.

"Responsibilities of the [IT] rating have expanded well beyond traditional radio sets and mainframes," then Chief of Naval Personnel VADM D.T. Oliver wrote in a message to the fleet in 1999 regarding the name change from radioman to information systems technician. "The IT rating better reflects those skills and roles associated with the rating today, as well as in the future."

The IT rating again evolved in 2005 as the cryptologic technician communications (CTO) rating merged with the IT rating. The reason for the change was that ITs and CTOs basically performed the same job; the main difference being that CTOs were responsible for communicating special compartmented intelligence information over radio circuits.

"It is an incredibly exciting time to be part of any technology field in the Navy," said CID Corry Station Commanding Officer CAPT Connie Frizzell. "The skills of the IT specifically are in high demand, so job security is good."



Frizzell explained that the technology turnover rate is about every six months, so there's always something new to learn and the skill sets apply to every phase of operations.

For example, the information systems technicians of the 21st century operate and maintain the Navy's global satellite tele-communications systems, mainframe computers, local and wide area networks, and micro-computer systems used in the fleet. Administrative support is also provided with the operation of automated equipment that keeps records of personnel training, disbursement, health, assignments and promotions within the Navy. They ensure the all-important communications link between units at sea and stations ashore.

"Peacetime IT skills may include assisting emerging partner nations with advanced technology

applications; wartime IT skills are integrated to the success of putting weapons on a target," Frizzell said. "Job diversity for this rating is as diverse as the spectrum

of operations. At this point there will always be a job which meets the needs of

the Sailor as well as the needs of the Navy. That's good for our people, it is good for retention and it is good for the Navy."

Sauter explained that Sailors have traditionally operated from ships or naval bases, but as the enemy has changed and as the fight has evolved into an asymmetric war, the Navy has adapted and is overcoming those new challenges. As a result of their technical expertise, Navy ITs are in great demand around the world by

*Soldiers and Marines refer to the Navy's electronic experts as "Sand Sailors" -- a nickname they are proud to adopt.*



other branches of the United States military. These Sailors are finding themselves working in combat zones particularly in desert environments as individual augmentees (IA).

In fact, Soldiers and Marines refer to the Navy's electronic experts as "Sand Sailors" -- a nickname they are proud to adopt. Sauter estimates that about 25 percent of all CID Corry Station IT instructors have served as IAs in Iraq and Afghanistan.

"ITs are working side-by-side with Marine, Air Force and Army personnel to provide specialized communications and network expertise," Sauter said. "Although the systems used for kinetic ground operations are somewhat different from the ones that are used on board ships, the principles we teach in our classrooms apply to both shipboard and ground-based systems. This allows our ITs to report to their units and immediately contribute to the team anywhere in the world."

Information Systems Technician 1st Class (SW) Dave Doughty, a CID Corry Station IT instructor who spent a year with the Combined



ITC Candy Shire is greeted by children near a local clinic. (Photo by MC2 Eli J. Medellin)



Joint Task Force-Horn of Africa headquartered in Djibouti as ... an electronic key management system manager, explained that his role there was primarily to help keep track of and maintain \$400 million of digital and communications equipment for more than 2,000 joint and coalition forces station in nine countries throughout the Horn of Africa.

"While I was in Africa, I supported the Air Force, Army and Marines in addition to German and French coalition forces with equipment, key materiel and COMSEC (classified security equipment and materiel) policy," Doughty said. "It was a big operation and my team was constantly providing oversight, accountability and training to our designated local element managers, the people who were our authorized customers."

Doughty said his fellow ITs had other jobs there such as network administrators and field communications operators. Still other ITs were attached to operations

field units. "Some of them would go into the field with ground forces and I wouldn't see them for a couple of months," he said. "That's what you call personalized support."

The speed, flexibility, agility and scalability of maritime forces provide joint or combined force commanders a range of options for responding to crises, and it's the Information Systems Technicians of the U.S. Navy that help keep those critical data and communications lines open.

"Communication with planes on a carrier or troops on the ground has to come through the communication department," Alexander said. "The information systems technicians are the ones who process it all."





# HACKER CHALLENGE

Photo Illustration by Robin D. Hicks

Story & Photo by  
CTN1(AW/SW) Jarrod H. Delp

Can work be fun? CTN1 Theresa Verity thinks so. Verity, a network analyst stationed at Navy Information Operations Command, Pensacola, FL, recently issued a challenge to like-minded peers. She developed and hosted a two-week event, called Hacker Challenge '08.

HC '08 was designed to provide a common ground on which participants could test their knowledge base and skill sets, as well as pick up a few new tricks and techniques through a hands on approach. While the challenge was put together during Verity's free time, using her own resources, she did brief some local participants in NIOC Pensacola's auditorium.

The competitors, however, varied in their use of on and off duty hours and personal and government computer systems. Some preferred to participate in their free time, and others had no choice but to do what they could using shipboard computers, for example.

The invitation was extended to both military and civilian Department of Defense employees working in network-centric jobs around the Fleet. Twenty-four individuals of various networking background and skill levels answered her challenge. Participants hailed from a wide range of commands including several NIOCs, Fleet Information Operations Centers (FIOCs), and even a Guided Missile Destroyer (DDG).

In this challenge, participants tried to attain points by completing tasks, answering questions, and solving puzzles. Although a winner was determined based on points earned, the competition was primarily designed to be a learning experience. Verity says, "The goal is to foster real-world skill sets and thinking outside the box."

HC '08 kicked off with distribution of the guideline booklet and the tools needed. Individuals could download all of the material from a Web site created by Verity. The contestants also had to create an alias in order to use File Transfer Protocol (FTP), which is how data was passed to Verity for review. An Internet Relay Chat (IRC) channel was designated for use throughout HC '08 for interaction between

Verity and participants.

Players were given over 280 questions and tasks covering 16 topics, including Password Security, Network Forensics, Basic Packet Analysis, and Cryptology, just to name a few. The contestants could tackle the topics in any order and FTP the results to Verity as they completed individual items. Points were awarded on a predetermined scale based on the difficulty of the task. The greatest resource at the contestants' disposal was the Internet. The rules authorized the use of anything available on the Internet, though collaboration between players would be considered cheating.

Verity also maintained a persona who the players could contact online and test their social engineering skills. This fictitious person was played in character by Verity in order to provide players a non-moderator personality to query. She even awarded creativity points to those willing to try gleaning information from her. Verity took steps to ensure laws were not broken, and that the event was maintained in a controlled environment to prevent collateral damage.

For instance, one task the players undertook was hacking a virtual machine. Players working on this task downloaded software that created the virtual machine on their own computer. For all intents and purposes, this virtual machine was a computer running Windows XP/SP1 operating system but had there been any accidental damage, it would be contained to the user's own system. The goal of this exercise was for the hacker to find and retrieve an implanted bit of information and FTP the proof back to Verity.

Verity believes that enjoying your job correlates directly with how well you do at it. "You become a much greater resource for the Navy to draw upon," she emphasized. "I'm confident in my ability to perform the duties of my rate and hope that HC '08 will strengthen others' abilities."

According to Verity, Sailors who participated in HC '08 just might have an edge on their next advancement exam. "Some of the tasks found in the challenge are daily responsibilities for CTNs and network analysts," she added. "Identifying malware, performing online research, reading packet traffic, and using common security tools are a few things

that have been seen on CTN advancement exams as well as HC '08."

On the last day of the event, scores were tallied and awardees were decided. The participants were asked to critique the challenge. Judging from their comments, not only did contestants provide positive feedback, they requested another challenge.

Verity says that there will be more to come. "This is the first of several," she claims.

The feedback even asked for a team-oriented challenge, and Verity plans on providing one. She hints that there may even be more specific events, such as a wireless challenge involving only wireless devices and security. One obstacle, however, is the amount of time involved in creating such an event.

HC '08 took about two months of planning and compiling data. Verity would like for future challenges to have a high enough demand that she would recruit volunteers to assist her. "I can support 50-60 [participants] currently...it's very scaleable," she concluded. "Hopefully I'll have a few more volunteers for future challenges, who may be able to help me man chat rooms, provide social engineering personalities, answer questions, and prepare tasks for the participants."

Congratulations to CTN1 Mario DeTore of NIOC Maryland, the winner of HC '08! 



CTN1 Theresa Verity explains the rules to Hacker Challenge '08 competitors.



# Practicing Cyber Security at Home

Story by CTN1 Melissa Wong

Photo Illustration by Robin D. Hicks

Cyber security is the set of principles and practices designed to teach you how to safeguard your computing assets and online information from threats. You probably use many kinds of current technology such as internet-connected computers, cell phones, personal digital assistants (PDAs), digital cable or satellite television, ATM machines, credit/debit cards, and more. Given how much a part of your daily life this technology has become, it is imperative that you learn to protect yourself from cyber crimes by arming yourself with cyber security knowledge.

Most of us require a vehicle in order to facilitate daily life. Driving can be great fun when you first learn how to drive. We expect that when first-time teen drivers sit behind the wheel of a car; someone will be next to them, teaching them how to drive with skill and safety. As parents, we want our children to become safe drivers, so we provide them with driving lessons and driver's education classes that emphasize safety, skill, and knowledge. Parents understand that a driving mistake could cost them their lives.

While it may be unlikely that the uneducated use of computers and the internet could lead to a threat to physical safety, there are many other serious threats in the cyber world.

Communication and computing technology are the "vehicles" that we use to create, transport, exchange, extract, and store all kinds of information. When we allow our children to use these sophisticated tools without proper training and preparation, or with no warning about the dangers, they may often inadvertently cause damage, expose themselves to inappropriate content, or encounter malicious individuals.

You can avoid online dangers by becoming aware of the types and severity of various threats, learning how to protect against these threats, and consistently monitoring your computers' behavior and your family's internet use.

Here are 11 tips to protect yourself and your family when you use a computer to access a network:

## 1. Understand Cyber Security Risks. Here are some definitions you should understand:

**Virus** - self-replicating code that spreads by inserting copies of itself into other software programs or documents

**Trojan horse** - a malicious program disguised as legitimate software  
**Worm** - a self-replicating, self-spreading malicious program

**Spyware** - software that sends information from your computer to a

third party without your consent

**Malware** - programs designed to harm your computer

**Intrusion** - trying to gain privileged access to computer systems in order to steal, corrupt, or illegitimately view data

**Identity theft** - the theft of personal information to commit fraud.

## 2. Create "Strong" passwords.

Use a unique password or passphrase that you can remember, and change it often. A strong password consists of at least eight characters and should include letters, numbers, and special characters such as punctuation marks. As a memory aid, you can use a phrase or sentence. Letters should be both connected and disconnected.

Examples of strong passwords:

J\*p2leO4>F.

H@rd2Cr@k!

Do not write your password down anywhere, instead, if you need to, record a hint that will help you recall if you forget.

## 3. Use and maintain Anti-virus and Anti-spyware Software.

Anti-virus and anti-spyware

software scans files in your computer's memory for certain patterns that may indicate an infection. It is important to update your anti-virus and anti-spyware software frequently to have the latest virus definitions or spyware profiles available on your computer. New viruses are discovered daily. The effectiveness of antivirus software is dependent on having the latest virus profiles installed on your computer so that it can look for recently discovered viruses. It is important to keep these profiles up to date.

## 4. Use and maintain a Firewall.

The firewall acts like a guard, keeping potentially dangerous files, requests, or programs from accessing your computer. It permits only appropriate traffic to enter and leave the computer. You can also set-up your firewall to block access to certain websites and allow others.

## 5. Use care when reading email that contains attached files.

Email has developed into the primary method of communication for many people. Both at home, and at work, users rely on email to communicate with one another. Unfortunately, spam, phishing attacks, and malicious file attachments (among other things)

make email a risky proposition at times. Email can contain worms and viruses in an attachment, so before you open an email, ask yourself the following questions:

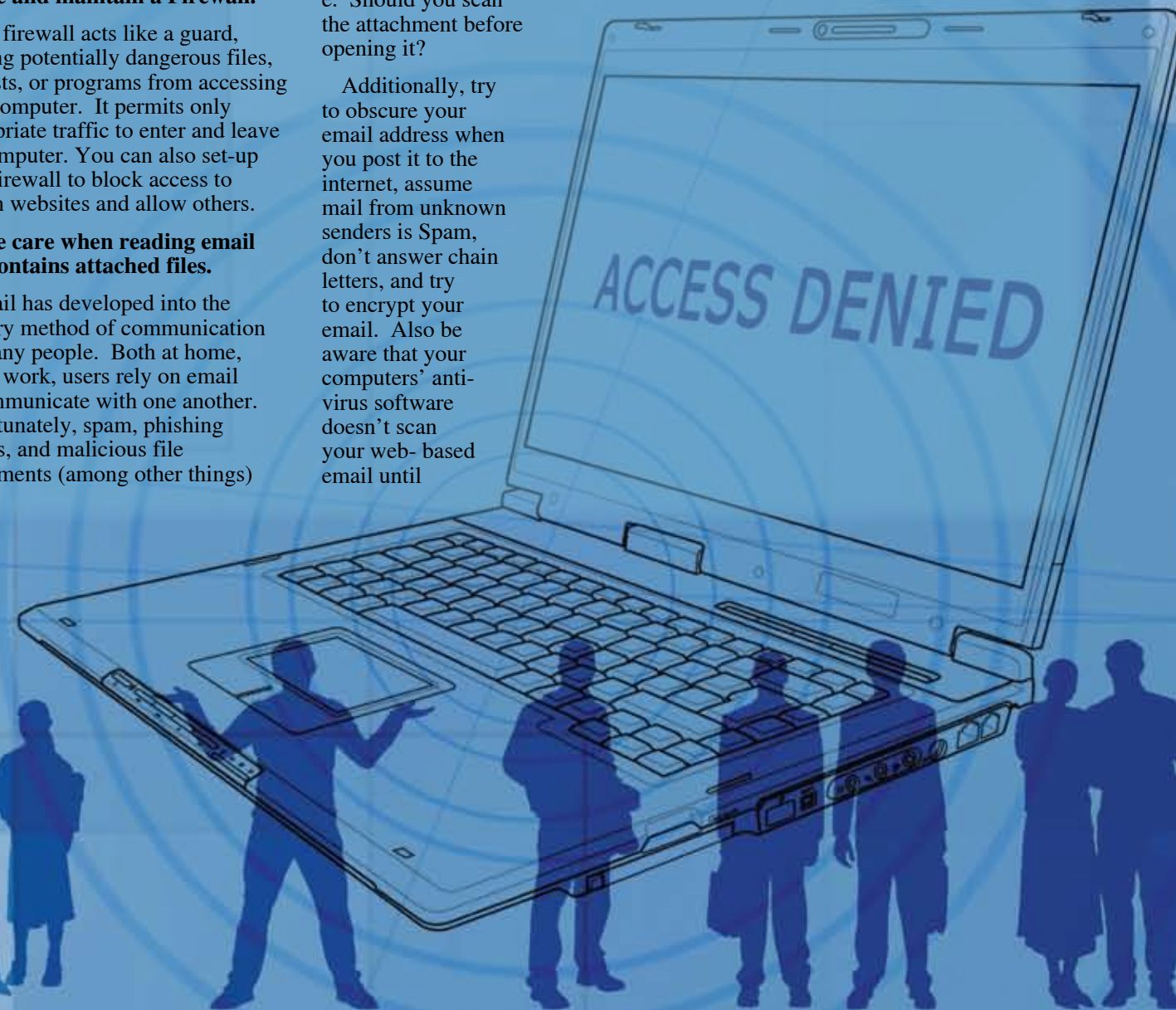
- Is the email from someone you know?
- Have you received email from this sender before?
- Were you expecting email with an attachment from this sender?
- Does the subject and name of the attachment make sense?
- Should you scan the attachment before opening it?

Additionally, try to obscure your email address when you post it to the internet, assume mail from unknown senders is Spam, don't answer chain letters, and try to encrypt your email. Also be aware that your computers' anti-virus software doesn't scan your web-based email until

you download the attachment to your computer. Ensure your email provider (Yahoo, Hotmail) scans the email and any attachments before it's downloaded to your home computer.

## 6. Make backups of important files and folders.

Backup all important files, information, programs, and folders every time a change is made (or at least once a week). Just as you protect your irreplaceable valuables, back up the files you cannot replace. Keep your backups in a safe place





such as with other valuables in your house or, even better, in a secure location away from your home.

## 7. Use care when downloading and installing programs.

Make sure you do the following:

- Buy software and programs from vendors that you trust or who are well-known nationally.
- Learn about the software and the programs you are purchasing.
- Make sure the software you choose has been used safely by others or recommended to you from a knowledgeable, trusted individual.
- Install programs that will not take all available space on your hard drive and that do not negatively affect other programs you rely on.

## 8. Establish user accounts when sharing your computer.

When sharing your computer, do the following:

- Create a separate account for each user.
- Limit privileges for some accounts, such as children or guests.
- Lock your computer when you are away from it.
- Choose restrictive options in your security settings for hardware and for programs such as web browsers and email programs.
- Disconnect your computer from the internet when you are not using it.

## 9. Establish security guidelines for anyone who uses your computer.

- Create a family contract with clear rules for using the computer and make sure everyone understands and agrees.
- Keep a list of internet access

guidelines and good computing practices close to your home computer for all to see.

c. Stay aware of the security aspects of any technology or software used at home, learn about any associated threats and how to handle them, and share this knowledge with your family.

## 10. Protect your children online.

Although software can help you protect your family from inappropriate content on the Web, there is no substitute for teaching your children a few basic rules. Talk to your children about the risks of going online, and how to handle uncomfortable situations. And finally, set limits, and discuss them with your children. Together, you can create a fun and safer environment for your children online.

- Keep the family computer in a centrally-located place where an adult can easily observe what is happening.
- Discuss guidelines for computer use.
- Occasionally use the internet with your children.
- Stay informed about potential cyber threats against children and the protective measures you can take.
- Implement parental control tools.
- Know your children's online friends.
- Teach your child to never give personal information to anyone online.
- Teach your child to never trust people online they do not know personally.
- Provide separate user accounts for each child and control their access.

j. Consider installing software that allows you to monitor your children's activity on the internet.

## 11. Make your wireless network hard to find.

Since the capabilities of each wireless router are different from brand to brand, it's best to get the vendor's recommendation on the best security options for their devices. Change the well-known default admin password of your wireless router.

After a potential attacker detects a wireless network; this is one of the first and easiest ways to further compromise it. Some vendor's wireless routers offer the option of changing the power settings. By turning down the power, your wireless network is not broadcasting its signal farther than you really need it to. Enabling Media Access Control (MAC) address filtering will help restrict access to your home wireless network to only those users you authorize. If Wired Equivalent Privacy (WEP) is the only security option available on your wireless router, use a key that is hard to guess and change it periodically. Preferably Wireless Protected Access (WPA or WPA2) would be the best option to use over WEP due to its higher encryption security level.

Your wireless router may come with a default SSID already configured. Change it as soon as you set up your wireless network. Also, some vendors may offer the option of not broadcasting this network identifier. If you do wish to broadcast SSID don't use your name or any personal revealing information. New firmware can help resolve compatibility problems, plug security holes and provide other important fixes. Check the vendor's web site for these updates. ☐

# The "Indispensable" Battle Buddy

By Cheri McCullough, NETWARCOM IA Coord.

In the U.S. military services, a battle buddy is a partner of a service member who watches over the other. Although battle buddies differ in race, ethnicity and age, they all have a common responsibility to look out for one another and provide encouragement in their day-to-day activities.

The term "battle buddy" first evolved during Army basic training. Each recruit was assigned a battle buddy to monitor the physical well-being and behavioral patterns of his or her partner.

The buddy system is a procedure which is used in all branches of the service. For example, the Air Force refers to battle buddies as "Wingmen"; in the Navy, the moniker is "Shipmates" and Marines simply address each other as "Marine." Regardless of which term is used, a battle buddy can be defined as a type of brotherhood or sisterhood that exists in the military.

As the Navy's presence increases in supporting the Global War on Terrorism (GWOT), the need for an effective battle buddy system will play a significant role in ensuring our Sailors receive the necessary support to complete the mission. Officials agree that, whether it be a service member fighting in a war or reporting to a new command, everyone could use the support of a battle buddy while adjusting to a new environment.

The selection of a battle buddy is an informal process. The member will typically choose a close friend, co-worker or supervisor to be a part of his or her support system, that will be that one person who can be relied upon for up close and personal support.

"I enjoyed being a battle buddy," said MC1(SW/AW) Corey T. Lewis, lead petty officer at NETWARCOM Public Affairs, who supported MC2 Travis Burcham in his recent deployment to GTMO. "It was a very important part of the IA process -- I provided simple things that he needed and I also served as his sounding board. However, I felt that the most important

contribution I made was being able to take care of things for him on the home front."

Once a battle buddy is assigned, the next step is to determine responsibilities. The question most asked by battle buddies is ... "What exactly am I supposed to do?" Well, as a battle buddy, the main goal is to proactively support deploying Sailors and their family members through every phase of deployment and re-integration back to the parent command.

So, what type of support is required? The support provided by a battle buddy can range from the most complex issues of preparing a Sailor and their family for deployments to something as simple as submitting an email to the Sailor thanking them for their support and dedication.

Photo by MC2 Adrian White



(Left to right) LT Kenya Williamson (Battle Buddy) listens to LTJG Welton Lawrence describe his duties in Afghanistan. Lawrence was an IA from June 2008 to January 2009.

Additionally, constant communication with the IA deployed Sailor, the battle buddy, the family and the command is vital. It is imperative that while Sailors are deployed, each is made to feel comfortable ... knowing that they have command support, and that their families will be cared for throughout their deployment.

Although many commands have assigned IA coordinators to

assist Sailors in preparing for IA/GSA deployments, are agencies such as Fleet and Family Services Center (FFSC) and Expeditionary Combat Readiness Command (ECRC) have come together to provide a myriad of resources and support to IA Sailors and their families.

In a combined effort, the support team's main goal is to ensure Sailors and their family members are mentally and physically prepared to assume their newly assigned duties and responsibilities in support of the battle against terrorism.

"We must all realize that getting through a deployment will never be an individual accomplishment, but a team effort," said LTJG Ken Brooks, IA coordinator for the Domain's cryptographers. "Bottom line, the benefits of having a battle buddy significantly outweighs not having one. Essentially, the role of a battle buddy is more than just being a "Shipmate," it is a bond that is simply indispensable!" ☐



## VISUAL MAP

codeword: **HACKED!**

## Cellular use raises Security Challenges

Story by MC2 Adrian White

As cell phone use has become commonplace, the threats posed by eavesdroppers have also grown in recent years. A prominent example of the inherent challenges to mitigating these threats is the \$3,500 “Super BlackBerry” cell phone created by the National Security Agency (NSA) to provide President Barrack Obama with secure communications.

“There are three areas where security issues come to play with the BlackBerry (and other cell phones),” said Marianne Chalut, ODAA enclave security lead. “They are the physical control of the device, user training to maintain cognizance of their location, and the device needs to have a data at rest (DAR) solution to protect information in case the device is stolen,” she said. “However, these are not the only security concerns.”

Because a cell phone is basically a radio transceiver, anyone who uses one can easily be monitored. The eavesdropper first finds a target and then uses specialized equipment to pick up the cell phone transmission.

According to the North American Aerospace Defense Command (NORAD), there are several cell phone vulnerabilities that all cell phone users should be aware of:

1. Conversations can be monitored.
2. Cell phones can be turned into microphones while inactive.
3. Cell phones can be “cloned,” which involves thieves making calls that are charged to the user’s account.

When an eavesdropper clones a phone, he or she intercepts both the electronic serial and mobile identification numbers and programs them into another phone to make it identical to the users. By doing this, the eavesdropper can use the phone as if he or she were the actual subscriber.

NORAD statistics show that in 1996 alone, cloning resulted in approximately \$650 million worth of fraudulent phone calls and more than 800 arrests made for the offense. In one cloning incident, more than 1,500 telephone calls were placed in a single day by cell phone thieves using the number of a single

unsuspecting owner.

Another example occurred in 1997 when then Speaker of the House of Representatives Newt Gingrich was having a conference call in which his cell phone transmission was “accidentally” recorded and reported in the New York Times and other newspapers.

The FBI has recently been using the “roving bug technique” in criminal investigations to listen in on nearby conversations. This surveillance technique was described in a December 2008 (online by CNET) article which quoted U.S. District Judge Lewis Kaplan as saying, “The roving bug technique is legal (by certain government agencies) because federal wiretapping law is broad enough to permit taping conversations that take place near a suspect’s cell phone.”

If the government has the technology to use this technique, then the potential for private citizens to use the technology also exists.

Cell phone users should be aware that technology is constantly changing and they need to know that they are constantly being watched. To protect themselves from being a target, NORAD suggests following these guidelines:

- Turn on the cell phone only when you need to place a call.
- Limit your cell phone use to only necessary functions.
- Do not carry a cell phone into any classified area where sensitive discussions are held.
- Do not discuss sensitive information on a cell phone.
- Do not leave the cell phone unattended.
- Avoid using your cell phone in heavily populated areas.

Cell phone use can be difficult to eliminate from daily life; however, users should understand that there are people out there who have the ability to gain control of their phone. These vulnerabilities can affect users both financially and professionally, so all cell phone users should be careful before they make a call.

## SYSTEM PANEL

Score : 3340 06:23.4  
Trace : 49 %  
Dynamic difficulty factor : 2  
Money : \$0  
Hack count : 91  
Trace count : 6

Bounced link : through 1 host  
Trace ETA : 16:6 s

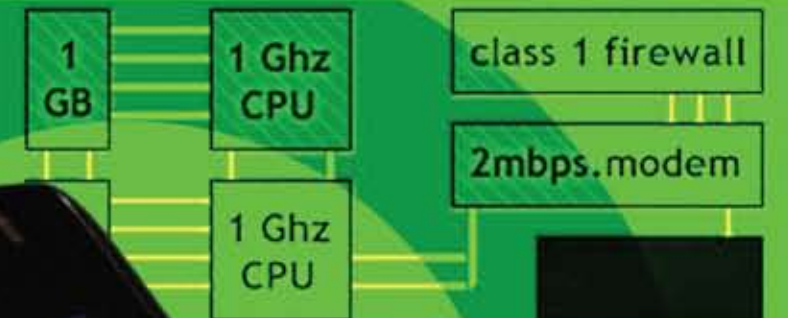


Photo Illustration by MC2(SW/AW) Justin L. Ailes





## State-of-the-art System Arrives in Hawaii

By MC2 John W. Ciccarelli, NCTAMS PAC Public Affairs

**WAIHAWA, HI** – The Navy’s Communications Satellite Program Office (PMW-146) recently installed the first of three new state-of-the-art Mobile User Objective System (MUOS) satellite dishes at Naval Computer and Telecommunications Area Master Station, Pacific.

MUOS is a next-generation narrowband tactical satellite communications system, intended to extensively improve ground communications for U.S. forces during operations on the move.

“MUOS is a Department of Defense Ultra High Frequency Satellite Communications system that provides the war fighter with modern worldwide mobile communication services,” said James Cairns, NCTAMSPAC project manager. “MUOS adapts commercial cellular phone

architecture for use in a military system using satellites in place of cell towers.”

Technicians raised the 34-ton dish more than 80 feet to its permanent spot where it will point to one of five highly sophisticated satellites scheduled to

Photo by MC2 John W. Ciccarelli



Satellite Dish “Row” on Wahiawa, Hawaii

be deployed into space starting in 2010.

“The General Dynamics Satellite Communications (SATCOM) team [the Integrated Ground subcontractor for MUOS]

assembling the MUOS antennas are true professionals,” said Cairns. “There was lots of planning that went into this evolution behind the scenes, but once we got all the pieces in place everything went off like clockwork. It couldn’t have gone any smoother.”

Construction on the site began in July 2007 and will change the way the Navy communicates in the 21st Century.

“MUOS will use technological innovations to provide service to more military users and offer a truly effective communication capability tool in accomplishing the Navy’s maritime strategy mission,” said Cairns. “The great thing about MUOS is that it’s smart technology, but from the user’s perspective it’s simple and just plain works. The network is being designed to handle lots of users so units that don’t have

a SATCOM capability today will have it in the near future with MUOS.”

CAPT Janet Stewart, NCTAMSPAC commanding officer, was very pleased about the installation of the MUOS system and all the work the Navy’s Communication Satellite Program Office and its partners accomplished to bring this capability to the warfighter.

“A lot of parties have come together to be able to make this installation and this capability come to fruition,” said Stewart. “We have folks around the world, and around the United States, that have worked together for years and will continue to work together for years until all the MUOS satellites are launched and fully operational.”



(Above) Specialists make adjustments to MUOS Satellite dish from the inside. (Right) An Atlas rocket, shown here, is the standard delivery system for the MUOS satellite.







## USN Communications Satellite Program

The Navy's Communications Satellite Program Office (PMW-146) is based in San Diego, CA and has overall responsibility for the acquisition of narrowband communications satellites for the Department of Defense. PMW-146 reports to the Navy's Program Executive Office for Space Systems (PEO-SS) and manages the Navy's Mobile User Objective System (MUOS), Ultra High Frequency (UHF) Follow-On (UFO), Leased Satellite (LEASAT), Fleet Satellite (FLTSAT), Skynet, and Hosted Payload programs.

The UHF spectrum is the military's communication workhorse since it penetrates jungle foliage, inclement weather and urban terrain. Nearly 60 percent of SATCOM users are supported via the UHF band. More than 20,000

UHF terminals are currently in military use on more than 50 different terminal configurations, many of them designed to be small and portable enough to be carried deep into theaters of operation.

As the existing UHF SATCOM constellation (comprised of UFO, LEASAT, and FLTSAT) reaches its end of life, the time gap prior to the first MUOS launches

combined with the greater than expected demand for SATCOM capability has

created a potential decline in availability of legacy capacity. As a near-term mitigation action for the predicted gap, the PMW-146 UFO team recently successfully tested the viability of dual Digital Receiver Unit (DRU) operations on UFO F-11.

Operating both of UFO F-11's DRUs simultaneously will provide an additional 10 UHF channels to the warfighter. Another step being taken is to lease UHF SATCOM services from commercial vendors that have UHF payloads on orbit.

PMW-146 is finalizing the purchase of services in FY09 for multiple UHF SATCOM channels on Intelsat's Skynet-5C. Finally, PMW-146 is managing the Hosted Payload program which will be a Navy/Industry program to design, build, integrate and test a contractor-owned and operated UHF SATCOM

Hosted Payload capable of providing a minimum of eight 25 kHz UHF SATCOM Channel Service.

## Mobile User Objective System

The Mobile User Objective System (MUOS) is a narrowband Military Satellite Communications (MILSATCOM) system that supports a worldwide, multi-Service population of users in the Ultra High Frequency (UHF) band, providing increased communications capabilities to smaller terminals while still supporting interoperability with legacy terminals. MUOS is designed to support users that require greater mobility, higher data rates, and improved operational availability.

MUOS is scheduled to provide initial On-Orbit Capability in 2010 and will achieve Full Operational Capability in 2014. MUOS adapts a commercial third generation (3G) Wideband Code Division Multiple Access (WCDMA) cellular phone network architecture and combines it with geosynchronous satellites to provide a new and more capable UHF MILSATCOM system. MUOS includes a satellite constellation of four operational satellites (with one spare), a ground control and network management system, and a new waveform for user terminals.

The ground system includes the transport, network management, satellite control, and associated infrastructure to both fly the satellites and manage the users' communications. This system will provide greater than 10 times the system capacity of the current UHF Follow-On (UFO) constellation.

The new waveform is termed the MUOS Common Air Interface, a Software Communications Architecture compliant modulation technique for Joint Tactical Radio System terminals and upgraded legacy terminals. The first version of the MUOS CAI has been provided to terminal developers in 2008, with updates provided yearly through 2011.

User information will flow to the satellite via UHF WCDMA links and the satellites will relay this to one of four interconnected ground sites located in Hawaii, Virginia, Sicily, and Australia via a Ka-band feederlink. These facilities identify the destination of the communications and route the information to the appropriate ground site for Ka-band uplink to the satellite and UHF WCDMA downlink to the correct users. MUOS will also provide users access to select Defense Information System Network voice and data services

Each MUOS satellite also carries a legacy payload similar to that flown on UFO F-11. These legacy payloads will continue to support legacy terminals, allowing for a more gradual transition to the MUOS WCDMA waveform. The prime contractor and system integrator is Lockheed Martin (LM) Space Systems of Sunnyvale, CA; with team members from LM Commercial Space Division in Newtown, PA (spacecraft), General Dynamics C4I of Scottsdale, AZ (Ground & Waveform), and Boeing Integrated Systems of El Segundo, CA (spacecraft legacy UHF payload and channelizer). The satellites will be launched aboard Evolved Expendable Launch Vehicles (EELV) from Cape Canaveral, FL.

# CENTRIXS bridges Communication Gaps

By MC1 Jessica M. Bailey, CDR Task Force 73 Public Affairs KEMAMAN, Malaysia

The Combined Enterprise Regional Information Exchange System, or CENTRIXS, is a reliable system that allows combined forces to communicate through secure channels and share information in a tactical, real-time setting which creates enhanced interoperability. Recently, U.S. and Malaysian armed forces put the system to the test in the third phase of Cooperation Afloat Readiness

and Training (CARAT) exercise. CENTRIXS was a fairly significant piece of the CARAT puzzle that made everything click. CENTRIXS was the great enabler, allowing ship-to-ship operational dialogue between the two nations in both text and Web-based formats.

RADM William Burke, the executive agent of CARAT, has long expressed the value of CENTRIXS to CARAT and believes the system not only bridges the communication gap between participating nations, it takes the exercise to a more challenging level.

"Communication is the key to our success," Burke said. "With CENTRIXS installed in the exercise headquarters, on board Royal Malaysian Navy ships, and throughout the U.S. CARAT Task Group, we have an opportunity to reach new heights in combined command and control."

CENTRIXS consists of a collection of coalition wide area networks (WAN) known as "enclaves" which

include CENTRIXS' 4-EYES (the United States, Australia, Canada and Great Britain); CENTRIXS-J for the United States and Japan; and CENTRIXS-K for the United States and Korea. The establishment of additional

CENTRIXS networks, is determined by the demands of the particular exercise or world situation.

"There is also the Global Counterterrorism Task Force

Harpers Ferry (LSD 49).

The sturdy, user-friendly system is operated from the standard laptop computer, with assistance from some heavier hardware including a 250-pound, rack-mounted electronics system. On the lighter side, there are two additional laptops and a portable International Mobile Satellite Organization terminal for optimum connectivity.

"With CENTRIXS you can have one on one chat with

different allied forces, exchange information, view pictures, documentations, and mission progress of other allied forces as long as they are all on the same server," said Odulana. "Another aspect of CENTRIXS is its ability to navigate its Web site even if there is no Internet connectivity." The advantage of CENTRIXS over other

more traditional methods of secure communication is its versatility and ease of operation.

Text-based exchanges often eliminate confusion or misinterpretation of messages. CENTRIXS expedites the communication process while maintaining system integrity. "By using CENTRIXS, the communication process with the various forces and CARAT

headquarters runs smoothly, confusion is eliminated," said LCDR Chandra Sehgaran of the Royal Malaysian Navy. "It makes the communications network more reliable, valid and practical."

Global interoperability and



Malaysian and U.S. armed forces ford a river during the third phase of CARAT exercise.

(GCTF) 1 enclave, which can handle all 50-plus countries involved in

*"Another aspect of CENTRIXS is its ability to navigate its Web site even if there is no Internet connectivity."*

the global counterterrorism effort from shore and GTCF-0 for other countries accessing the network from U.S.-controlled spaces," said IT2 Oluwadamilola Odulana, the command approver for CENTRIXS aboard dock landing ship USS





U.S. and Malaysian Sailors screen approaching vessels in support of exercise CARAT. (Photo by MC1 Brian Brannon)

## CENTRIXS

By IT2 Danielle N. Reliford, UARNOC Public Affairs  
Norfolk, VA

The Naval Computer and Telecommunications Area Master Station, Pacific, Wahiawa, HI, now has a new partner in providing Combined Enterprise Regional Information Exchange System, or CENTRIXS support to the fleet. Beginning October of this year, NCTAMS LANT DET HAMPTON ROADS has come online and joined the CENTRIX network to assist NCTAMS PAC in providing help desk support and network monitoring services to fleet forces.

Cooperation on multi-national levels has increased significantly, and the need to provide improved ways of collaborating within a joint network securely has become very important. The CENTRIXS network affords partnering nations the ability to support military operations and share situational awareness. It encourages effective and efficient information sharing in the tactical and operational environment and the timely and secure flow of information between nations.

The most important advantage of DET HAMPTON ROADS acquiring CENTRIXS is the redundancy factor.

Until recently, NCTAMS PAC was the sole source for providing support and network monitoring to the entire fleet for this system. Now units will have the ability to shift from one provider to the other in the event of a systems outage, ensuring continued operability and mission readiness.

As of now DET HAMPTON ROADS is currently servicing three afloat units, with several others in the testing phase. With a dedicated 24/7 staff of engineers and technicians, DET HAMPTON ROADS is currently offering help desk support, network monitoring and troubleshooting services. Eventually, all fleet forces in the Atlantic will be teamed with DET HAMPTON ROADS for CENTRIXS services. But until such time DET HAMPTON ROADS remains diligent and dedicated to providing outstanding customer service and support to the fleet.

**EDITOR'S NOTE:** UARNOC is the Unified Atlantic Region Network Operations Center, which is located at NCTAMS LANT Detachment Hampton Roads, Norfolk, VA.



A NACTAMS LANT Sailor updates information on the command's server.

Official U.S. Navy Photo

## NCTAMS LANT Sailors Attend Inaugural Ball

From NCTAMS LANT Public Affairs Office

Just days before the inauguration of America's 44th president, Naval Network Warfare Command's leadership sought Sailors within its domain who would be interested in attending the inaugural ball. The selection was narrowed to those Sailors who had recently returned from a deploying Individual Augmentee (IA) assignment.

Numerous applications were received fleet-wide, but the Navy only had 100 tickets to the ball. Two NCTAMS LANT Sailors were selected to attend -- IT2(SW) Robert Esters and ET1(SW) John Wiltfong Jr., who was accompanied by his wife, Angela.

The 2009 Commander-in-Chief's Inaugural Ball was held in the National Building Museum located in downtown Washington, and all of the armed forces were well represented at this amazing event. Chief of

Naval Operations ADM Gary Roughead and Master Chief Petty Officer of the Navy Rick West were also in attendance.

"When Vice-President Joe Biden and his wife came out, the entire audience erupted in applause," commented Wiltfong. "He addressed the audience and spoke with some troops from Afghanistan via video teleconference."

Shortly after 10 p.m., senior enlisted advisors for each of service walked onto the stage in unison. A moment later, the U.S. Marine Corps band began playing "Hail to the Chief" and President and Mrs. Obama appeared on the stage.

The president made a few remarks

to the audience and then spoke via video teleconference with a group of Soldiers from the Illinois National Guard who were deployed to Iraq. Of the seven Soldiers on the screen, five were Chicago Cubs fans with the two remaining being Chicago White Sox fans. Being a Sox fan, the president had a good time joking with the Cub fans.

Following the first dance, the president danced with a female Soldier and a male Marine danced with the First Lady.

"The night was very eventful and well worth the opportunity to be a part of our government's celebration of our 44th President's inauguration," said Esters.



President and Mrs. Obama wave to ball attendees.

Official U.S. Navy Photo



(LEFT TO RIGHT) Angela Wiltfong and ET1(SW) John Wiltfong Jr. share a dance during the ball. Comedian, George Lopez, entertains ball guests as he carries out his Master of Ceremonies duties. IT2 Robert Esters and MCPON Rick West pose before the ball begins.

Official U.S. Navy Photos





# Cut Off

## ISOLATION FROM THE REST OF THE WORLD

By ET2 Gregory M. Clark, NCTS Bahrain (N6)

It is truly amazing how much we have come to depend on technology in our everyday lives, both at work and at play. Every once in a while, someone will pose the rhetorical question of “What if...?” and we tend to respond by simply shrugging it off and not giving much thought to the effect that would result from losing a function we have all grown to rely on.

However, “What if it really did happen?” What if, say, the Internet—that magical web of fiber optic cables we take for granted—really did just “go away?”

At the end of January the hypothetical suddenly became a hard and sobering reality when two of the three primary underwater fiber optic cables were severed. The lines, known as FLAG (Fiber-Optic Link Around the Globe) Europe-Asia (owned by Flag Telecom) and SEA-ME-WE 4 (South East Asia - Middle East - West Europe 4), owned by a consortium of 16 international companies including AT&T and France Telecom, are responsible for carrying the majority of the voice and data communications. The third line, SEA-ME-WE 3, was not severed, however services were severely degraded.

Immediately upon receiving notification of the outage, the dedicated men and women of Naval Computer and Telecommunications Station Bahrain sprang into action. Bandwidth capacity was greatly decreased for a local provider and totally cut on multiple commercial vendor networks. The immediate result was severely degraded inter-theater connectivity.

“It wasn’t something that we thought was in the realm of possibility until that day,” comments Terry Linzmeier (N6-Fleet Systems Engineer Team (FSET)). “We went from a normal day to, ‘Everything is down, so where do we go from here?’ in a couple of seconds.”

“Once we determined it was a fiber issue, it didn’t take us long to come up with a plan,” recalls Antonio Galvan (N6-FSET). “It was nice to see all the different teams come together and find a solution.”

NCTS Bahrain Commanding Officer, CDR Herman L.

Archibald, was extremely pleased with the support from all the departments and divisions—the SATCOM Watch Section, Joint Fleet Telecommunications Operations Center Watch Officer, Maintenance Technicians, Tech Control, and Fleet Network Operations Center.

Within a few hours of the outage, plans were devised for restoring the first of many critical services. Approval was granted by the Defense Information Systems Agency to create new SHF satellite connections. NCTS Bahrain SATCOM personnel also diligently worked around the clock with DISA and Regional Satellite Support Center - CONUS on six Integrated Digital Network Exchange terminations. They were also assisted by ET1 Chris Goodyear and ET1(SW/AW) Stewart McFarland (NCTS Naples) in establishing a Packet Star Asynchronous Exchange (PSAX-to-PSAX) trunk. In a short time, successful testing of the new trunk was completed and ready for DISA approval. The new bandwidth was made available to DISA for prioritization and mission-critical services early the following day.

Upon reestablishing temporary terrestrial paths, NCTS Indian Ocean Regional Network Operations Center FSETs Paul Ruiz, Robert Butterfield, Jeff Kelley, and Wayne Jefferson reconfigured plain language to activate 14 fleet units and the ONE-NET services to Southwest Asia AOR.

To help alleviate congestion, NCTS Bahrain worked in cooperation with Theater Network Operations Center, Central Region and DISA in establishing a Priority Access List.

Full commercial services to the region were restored 12 days later upon completion of repairs to the severed undersea fiber optic lines.


The NCTS team was truly phenomenal in evaluating the problem, developing a solution and executing the plan that restored SWA AOR connectivity. The experience helped to codify procedures to best deal with any future outages. 

Photo Illustration by MC2(SW/AW) Justin L. Ailes





# LESSONS LEARNED UTILITY

By Dave MacEslin, NIOC Norfolk

As a former analyst at the Joint Center for Lessons Learned, I am acutely aware of the importance of the Navy's Lessons Learned System. I must admit I dislike the term "lessons learned" because I believe it is a misnomer. It is an inaccurate catch-all for three separate and distinct processes used by the JCLL to formally categorize items in the lessons learned database:

**OBSERVATION** - a unit saw or did something interesting.

**LESSON** - a unit had a problem they were unable to fix by following doctrine, operating procedures, tech manuals, or other written guidance; or the equipment did not function as expected; and the lesson describes how they fixed or got around the problem. The lesson presented a work-around to a problem.

**RAP** (remedial action plan) - a unit had a problem and followed all written guidance in an attempt to fix the problem, but could not resolve the problem and there is no method to correct the problem. Within the Navy lessons learned system, a RAP requires corrective action to be taken.

Each report is essential to the JCLL process and is invaluable to me as a doctrine writer at Navy Information Operations Command Norfolk. More about this in a moment.

A lesson is not truly learned until the deficiency it identified has been corrected. A lesson is learned, for example, after the problem has been researched and/or replicated, and the doctrine, technical manual, or other written guidance is modified to account for the situation, or a new tool or procedure is developed. If the problem was caused by inadequate hardware or software configuration, it must first be fixed, and the operators trained on the changes, for the lesson to be learned. If the problem was a deficiency in training, after the training pipeline is modified and the retrained operators are in the fleet, the lesson is learned.

One of our objectives as the Warfare Center of Excellence for Information Operations is to avoid the common misuse of the term lesson learned by ensuring that no IO-related lesson goes unlearned and no RAP goes unanswered. Our process for this is to review each and every lesson entered into the NLLS database to determine if there is a relationship to, or impact on, IO.

In a review of Operation Iraqi Freedom, NIOC Norfolk found that there were nearly 800 entries that in some manner pertained to, or affected IO. Of these, more than 60 percent showed a problem or lack of doctrine that required attention and placed the responsibility squarely on the shoulders of the WCOE.

The question then becomes, "What happens to the other 40 percent of the entries in the database?" NIOC Norfolk looks across the Doctrine, Organization, Training, Material, Leadership, Personnel and Facilities construct to see how to best resolve these entries. For instance, we collaborate on

training issues with the appropriate training commands, and the appropriate systems command or type commander for material problems.

As a doctrine writer, I want to provide the most useful and relevant doctrine to the fleet, but I can take action only on what is entered into the database or what I hear about on the waterfront. Those of us who write doctrine have limited visibility to problems in the fleet. I believe that any problem encountered in an operation or training event should be submitted to the NLLS immediately—not at the end of the deployment. Submitting problems immediately does several things:

1. It energizes the system for a quicker response and possible solution. In many situations, by the time a lesson filters through the chain of command and gets posted to the database, the originator of the lesson has transferred from the command, making it more difficult to get additional details during the resolution of the problem.

2. It eases the burden of review and promulgation on the chain of command. It is much easier to review 20 lessons as they occur over six months than try to remember and review them in the three days before you pull into port.

3. It avoids the submission of the top-10 syndrome, in which a command submits only what were their most important problems.

To expand on the third bullet, it is important for me as an analyst to see all problems that the fleet encounters. I call this the "thousand points of light theory"—in other words, if enough submissions are generated regarding the same issue, collectively they should be "bright" enough to illuminate the essential elements needed to provide the fleet with solutions.

As an example, if a ship encounters a problem that is fixed within the lifelines and does not submit the problem, it is beneficial to the ship that the problem is fixed. But suppose another ship has the same problem, and also fixes it without submitting anything to NLLS. The fact that two commands have had the problem might be indicative of a larger problem that requires addressing with a more permanent solution by the WCOE. Posting a problem on the NLLS helps define the problem quickly. Then a WCOE such as NIOC Norfolk can use the data to coordinate resolution of fleet problems.

An additional benefit to ensuring all discrepancies are entered into the NNLS is the possibility that someone else may have already solved the problem. Even partial solutions should be posted so other good ideas can be added to the original work until a final solution is determined.

The NLLS can be a valuable tool to a WCOE and fleet operators if sufficient data is loaded in a timely manner. In addition to enabling the WCOE to correct the deficiency within their capabilities, subject matter experts in the fleet may become energized to provide their own solutions or workarounds to problems.

Photo Illustration by MC2(SW/AW) Justin L. Ailes



# Navy's New Broadband Satellite Program Provides greater Reliability

Story by Steven A. Davis,  
SPAWAR Public Affairs

**T**he Navy has begun procuring the next generation commercial satellite communications terminals to augment its Military Satellite Communications. The procurement is designed to significantly increase throughput to ships at sea. Throughput is the amount of data transferred in a specific amount of time, usually expressed as bits per second.

The Commercial Broadband Satellite Program (CBSP) is sponsored by the Assistant Secretary of the Navy (Research, Development and Acquisition (ASN RD&A)) and executed by the Communications Program Office within the Navy's Program Executive Office for Command, Control, Communications, Computers and Intelligence (C4I). It is a Rapid Deployment Capability (RDC) acquisition to expedite replacement of Inmarsat B HSD and Commercial Wideband SATCOM Program (CWSP) capabilities.

The current RDC fielding requirement is to install CBSP terminals on up to 49 ships. Navy ships currently use Inmarsat B HSD (128 kbps) or CWSP (2.048 Mbps). CBSP terminals will be capable of delivering up to a near 10-fold increase in throughput from 881 kbps for the Small Ship Variant (SSV) equipped ships to 21.6 Mbps for the Force Level Variant (FLV) equipped ships. Throughput received by individual fleet units will depend on each ship's actual satellite allocation of CBSP bandwidth, which will be procured by PEO C4I in coordination with the Defense Information Systems Agency. The increased throughput capability will enable to ships to transmit voice, video and data faster and in greater volume. Additionally, the quality of life for Sailors will be increased by their ability to communicate using wideband SATCOM.

Chris Miller, who heads PEO C4I, the organization charged with acquiring, installing, and supporting communications and information technology systems for the Navy said, "Our warfighters need the added capability in order to ensure decision superiority – the ability to make informed decisions in critical situations – faster than the enemy."

According to Navy Capt. John W. Pope III, Communications Program Manager, the Navy is acquiring three variants of the commercial terminals, depending on the size and mission of the ship for which it is destined.

"Each terminal variant is capable of receiving differing

satellite spectrum bands depending on their use," said Pope. "The SSV is a Ku band terminal intended for ships operating in littoral waters. The Unit Level Variant (ULV) terminal will be commercial X and Ku capable and will be the size and weight to fit on unit level ships. The FLV terminal will access the C and Ku satellites and will be large enough to provide high data rate to force level ships."

Pope said his program office's goal is to deliver the capability as quickly as possible while balancing cost, schedule and performance, in addition to the challenges inherent in an RDC acquisition.

"This program plays a key role in the Navy's SATCOM roadmap strategy as we consolidate from five SATCOM terminal Programs of Record to two: CBSP and the Navy Multiband Terminal. This effort should allow the Navy to take advantage of newer technology and reduce overall lifecycle costs."

The Navy recently completed a Developmental Test and Quick Reaction Assessment of the first CBSP terminal, installed aboard the mine countermeasures ship USS Champion (MCM 4), under the command of Navy Lt. Cmdr. John Callaway.

"CBSP SSV is a significant improvement in capability and reliability," said Callaway. "It's the first time I have been able to surf the SIPRnet (Secret Internet Protocol Router Network) while at sea."

The increased bandwidth provided by CBSP was welcomed by Information System Technician Senior Chief (Surface Warfare) (ITCS(SW)) Jim Crewse, USS Champion Communications' Division Chief.

"Overall the system has been performing great and had added capability and performance for the ship," explained Crewse.

According to Melinda Ratz, the Assistant Program Manager for CBSP, the Navy's first priority is to install CBSP terminals on the most "bandwidth disadvantaged" users, a group that includes frigates, mine countermeasure ships, and coastal patrol ships.

"Additional SSV terminals were ordered after the successful Developmental Testing and Quick Reaction Assessment aboard USS Champion for installations beginning as early as September," said Ratz. "ULV terminals are being produced for installation and testing in spring 2009 to ensure the frigates receive this mission essential capability. The next priority will be to install CBSP on force level ships to replace CWSP."

Photo Illustration by MC2(SW/AW) Justin L. Ailes



## NCTS Jacksonville's BCO Hits its Mark

From NCTS Jacksonville Public Affairs

**N**aval Computer and Telecommunications Station. The name is publicized, talked about and even symbolized -- but how many people are actually aware of the importance of its mission to every command and non-DoD user in the Southeast Region.

The name, perhaps, signifies a command with critical circuits, large networks, and cutting edge technology. But, a major portion of its mission pertains to telecommunications.

Navy and commercial entities rely heavily on computer and internet connectivity; however, imagine the detriment to their workload if employees couldn't pick up the telephones to ask a timely question, report a problem, call emergency services, or contact the right person for the job? Fortunately, that's where the Base Communications Office (BCO) comes in.

The BCO at NCTS Jacksonville, FL, is now the Southeast Region central point for telecommunications. The mission of NCTS Jacksonville's BCO is to provide and ensure operational telephone services for shore and afloat units throughout the Navy's four Southeast Region divisions: Jacksonville, Pensacola, New Orleans, and Texas. Their vision is continual enhancement of the telecommunications infrastructure to fulfill the needs of the 21st century,




(Center) Chuck Bennett, BCO Dept. Head and CDR P.R. Mueller, CO, NCTS Jacksonville cut the ceremonial ribbon before moving into their new building. (Official U.S. Navy Photo)

while ensuring customers receive responsive and reliable support.

The BCOs are responsible for a wide range of management functions including the operation of the cable plant infrastructure, base communications facilities and services (leased and/or government-owned), contracts and switching networks which serve voice, data and video communications. There are 28 switching systems maintained by the Southeast Region, with approximately 54,300 analog, 9,900 digital and 5,600 ISDN customers. Nearly 11,000 service orders and invoices are processed each year.

The BCO Southeast Region

divisions continue to be responsible for day-to-day management, administration, operations, and maintenance of existing base communications facilities and services, whether leased or government-owned.

NCTS Jacksonville's BCO holds fast to its mission statement: "Shaping the way the Navy communicates." 



## NIOC Sailors Influential Throughout Hawaii

LTJG M. E. Lavoie,  
NIOC Hawaii Public Affairs

**HONOLULU**—On a recent Saturday morning, dozens of members of NIOC Hawaii's Junior Enlisted Organization (JEO) volunteered their services to help supply much-needed manpower to prepare the Honolulu Zoo for an upcoming event.

"The JEO has a nearly six year history of supporting events at the zoo," said CTM2 Shacarla Smith, NIOC

Hawaii's outgoing Community Service Committee chairperson. "They love seeing us because they know we're Navy and that we'll work hard."

According to Smith, it's well-known around the island that NIOC Sailors can be counted on to make a difference. Programs such as the Interfaith Hospitality Network shelter, Meals on Wheels, Habitat for Humanity, and the Relay for Life all benefit from the selflessness of our men and women.

Alongside the JEO that Saturday morning were other

(Right) IT3 Jai Pellerin keeps a herd of elephants at bay while his mentees enjoy the view. (Below) A Junior Enlisted Organization volunteer poses with students from Millilani Middle School in front of giraffes at the Honolulu Zoo. JEO and DEFY joined forces to assist in cleaning the zoo's grounds. (Official U.S. Navy Photos)




command volunteers who also serve in the Drug Education For Youth (DEFY) program.

DEFY is a comprehensive, year-long, multi-phased program that delivers leadership and life skills to provide youth ages 9-12 with the character, leadership, and confidence to engage in a positive, healthy lifestyle. CTI1 Anjela Armstrong explains that DEFY achieves this ambitious goal by "combining elements from many youth programs, including physical fitness, educational trips, and a well attended summer camp with



an 'Upward Bound' flair."

A nationwide DoD-funded program, DEFY falls under the Navy Alcohol and Drug Abuse Prevention Program. Members of commands serve as DEFY mentors. "We divide the kids into two age groups for our monthly events," explains Armstrong. "One is for 9 to 12-year-olds, and 13 to 17-year-olds serve as junior mentors along with adults."

The joint effort between the JEO and DEFY "was originally suggested by the DEFY Program Manager, CTI1 Armstrong," says JEO President CTI2 Abigail Paul. "I feel that both organizations benefitted from working together to help the zoo, while we learned a little about each other. The kids got to interact with some positive role models, and the JEO got to work with some terrific kids while seeing what DEFY is all about." 



## NIOC Maryland Garners Language Awards


-- **Language Professional of the Year:** CTI1 Julio A. Vela of Navy Information Operations Command (NIOC) Maryland

-- **Command Language Program of the Year:** NIOC Maryland

The Defense Language Institute Foreign Language Center (DLIFLC), Monterey, CA sponsors this annual competition to recognize excellence in two categories:

(1) *Individual achievement by a Foreign Language Professional*

(2) *Exceptional performance by a Command Language Program*

Both Vela and a command representative will be nominated for the larger cross-Service competition, which will be decided prior to the Command Language Program Manager (CLPM) conference to be held in Monterey, CA in May. 





# NIOC Texas Honors Pearl Harbor Heroes

Story by CTIC(AW/NAC) Marc A. Baldwin

Photos by CTI1(AW/NAC) Jesse J. Meunier

## FREDERICKSBURG, TX --

"History is a guide to navigation in perilous times. History is who we are and why we are the way we are."

- David C. McCullough

Sailors from Navy Information Operations Command Texas recently honored a key event in our Navy's history by supporting more than 100 Pearl Harbor survivors at the 67th National Convention of the Pearl Harbor Survivors Association (PHSA) at the National Museum of the Pacific War.

The weekend began with survivors riding as honored guests in the town's annual Christmas parade. More than 70 NIOC Texas Sailors and 50 Marines from Company H of the Marine Cryptologic Support Battalion marched in formation behind them to show appreciation for their courageous service.

"It was awe-inspiring to say the least," said CTR1(SW/AW) Bryan Walters. "To be able to meet someone who dealt with those harsh conditions and the terrible losses incurred during that fateful day was very humbling and made me feel proud to be in the same Navy that they once served."

"It was a truly remarkable event for the Sailors of NIOC Texas and for me personally," added CDR Stone Davis, NIOC Texas commanding officer. "Our intent was to show the survivors how proud we are of them and their

fallen shipmates, and to represent the Navy in a fashion that would also make them feel proud of us as well. We were humbled and honored to be a part of an event bigger than ourselves and such a wonderful tribute to true American heroes."

Led by CTRC(SW/AW) Brent Fountain, NIOC Sailors participated in every facet of the convention: meeting survivors as they arrived at the airport in San Antonio, escorting

important wars in history."

CTRC(SW/AW) Kelly Parker added, "This was a rare opportunity to experience living history. Pearl Harbor was a pivotal part of U.S. Navy history and I was able to experience that history through the people that were actually there."

NIOC Sailors helped with logistics for the weekend's culminating event, a memorial service honoring the fallen heroes of Pearl Harbor. During the memorial, the NIOC choir sang Navy and patriotic songs, participated in the joint color guard and rifle company, and stood in formation to honor the survivors.

The ceremony included flyovers by several WWII aircraft and a missing man formation of F-16s from the 149th Fighter Wing of the Texas Air National Guard. GEN James Cartwright, vice chairman of the Joint Chiefs of Staff, gave the keynote address and was introduced by former Commandant of the Marine Corps, GEN Michael Hagee. NIOC Sailors also helped the

survivors with a wreath laying, and a 21-gun salute was fired to honor the more than 2,400 men and women who died during the deadly Japanese attack on Pearl Harbor, Dec. 7, 1941.

The weekend served as a great opportunity for the Sailors of NIOC Texas to connect to one of the most significant events in our nation's history by shaking hands and talking with the survivors, including John Finn, a Pearl Harbor Medal of Honor recipient, the oldest living recipient



Two Pearl Harbor survivors lay wreaths during the Pearl Harbor memorial ceremony in Fredericksburg, TX. Former Commandant of the Marine Corps, GEN Michael Hagee, observed the event as Master of Ceremonies from the podium.

them to Fredericksburg and to various activities and events throughout the weekend and marching in the parade.

CTI2 Douglas Dixon was thankful for the opportunity to meet the heroes who had gone before him to defend freedom and democracy around the world. "As a Sailor it brought perspective to events that I've heard about my whole life," he said. "It gave me great pride to hear about everything they overcame in order to go on to fight one of the most

of the award.

The survivors and their families expressed their gratitude for the service of all the NIOC Texas Sailors, especially the escort drivers who stayed with the survivors throughout the weekend. Kathleen Farley, chair of the California chapter of the Sons and Daughters of Pearl Harbor Survivors said, "I can't tell you what a godsend these guys were. Not only did they all answer the call of duty, but went well beyond what was required of them to do... It makes me proud to be from a Navy family."

(Above) A Pearl Harbor veteran shares a story with a NIOC Texas Sailor. (Right) Pearl Harbor survivors ride as the guests of honor during the annual parade in Fredericksburg, TX. (Below) CDR Stone Davis, NIOC Texas CO leads the formation with CTICS(AW) Ulysses Nieves calling cadence.







Members of NIOC Hawaii Direct Support Element gather for a photo in front of the newly cleaned Bldg. 324.  
(Official U.S. Navy Photo)

## NIOC Hawaii Cleans up Historic Landmark

From NIOC Hawaii Public Affairs

Recently, more than 100 Pearl Harbor Direct Support personnel attached to Navy Information Operations Command Hawaii, a 1300-member strong command, came together for an All Hands effort to beautify Building 324.

The building is a piece of history, as the sole remaining portion of the Pearl Harbor Hospital that was in service during the Japanese attack on Dec. 7, 1941. Today, it is home to the Direct Support Element.

NIOC Hawaii members power-washed the exterior of the building, trimmed trees and hedges, edged walkways, removed old sandbags, repainted sidewalks and parking stalls, and removed vines and grass from the fence line. They also cleaned, sanded and repainted the static missile and torpedo displays.



(Left) LCDR Anthony Ellis congratulates CTMC(SS) Paul McGarvey for a job well done after the command's DSE spent the day cleaning Bldg. 324's grounds.

Official U.S. Navy Photo

(Left to right) Dr. Donald Kerr, U.S. Principal Deputy Director of National Intelligence presents the Naval Intelligence Medal of Valor to Lydia and Tom Daugherty, parents of CTI1 Steven Daugherty. Daugherty was killed with two other Sailors July 6, 2007, while deployed to Iraq. For more information concerning Daugherty, refer to pages 42-43 of the Fall 2007 edition of the InfoDomain magazine. (Official U.S. Navy Photo)



Then...



(Left to right) Jesse & Jeremy Nerius

...Now



Official U.S. Navy Photos

**EDITOR'S NOTE:** Jesse recently finished OCS two weeks before Jeremy and stuck around for the sole purpose of being his brother's commissioning officer. According to Jeremy, it was different having his little brother commission him. The brothers did find a place on the beach together near Naval Air Station Pensacola – and they have a great view of the Gulf of Mexico from their living room and bedrooms. They're hoping to complete their two years of training together - to include the same training squadron - and possibly their first assigned squadron. For more about the "Brothers Nerius" read their entire story in the Fall 2008 InfoDomain on pages 32-33.



# Electrifying Experience at Historical Electronics Museum

Story & photos by Petty Officers 1st Class Paul Goeth and Jason Faanes



**FORT MEADE, MD** -- When enroute to an unfamiliar location, today's drivers often use personal Global Positioning System devices to help guide them to their destinations. However, most people do not realize GPS got its start soon after the Soviet Union launched Sputnik in 1957. The Soviets wanted everyone in the world to hear their satellite, so they installed a continuous transmitter on Sputnik. American engineers soon after figured out how to locate Sputnik at any given time, and transversely where an object on Earth was, based on Sputnik's location.

These early advances in satellite tracking technology led to Project Transit in 1958. The Applied Physics Lab developed the Transit satellites for navigation purposes, launching Transit 1-A unsuccessfully, but Transit 1-B successfully. The success of Project Transit ushered in the Transit Navigation System, which ultimately led to modern day GPS.

The story of the history of GPS and many other

fascinating modern conveniences can be found at the Historical Electronics Museum. Located about 10 minutes from Fort Meade, the museum offers visitors a look through time at the progression and development of household items now taken for granted, as well as their military and or space program origins.

Did you know microwave ovens got their start from radar improvement technology during World War II? Magnetrons, the central component of modern microwave ovens, were developed by the British to increase the range,

power and accuracy of Allied radar systems of the time. On display at the museum is an original Westinghouse microwave oven, which belonged to the wife of broadcaster, Walter Cronkite. This oven used a military grade magnetron, which could cook a roast in a matter of a few minutes.

With the holiday season behind us it is hard to imagine that even a simple holiday decoration was once used in a military application. Tinsel, which trims the tree and gets strung around the house was once used as a form of radar deception known as chaff. Chaff, used by servicemembers of the Electronic Warfare community, saw its origins in World War II as a means to deceive enemy radar. "Millions of pounds of chaff were dropped on Germany, so much that you could rarely find a house on Christmas that did not have chaff on their tree," opined Michael Simmons, museum director.

Simmons has served as the director for more than three years. The museum opened in 1980 and is visited by more than 20,000 patrons annually. This nonprofit organization has been the site of various reenlistment and advancement ceremonies and dignitary speeches. The museum is open for walk-in and picture opportunities, however advanced booking is preferred.

Hands-on exhibits teach patrons about the fundamentals of electricity. One can order a large pepperoni pizza with extra cheese using Morse Code or look at early forms of electronic communication and cryptology to include a teletype machine, a 1943 radio truck mock up and a German Enigma machine that was used to encrypt messages. Visitors can delve further into the mystery surrounding the attack on



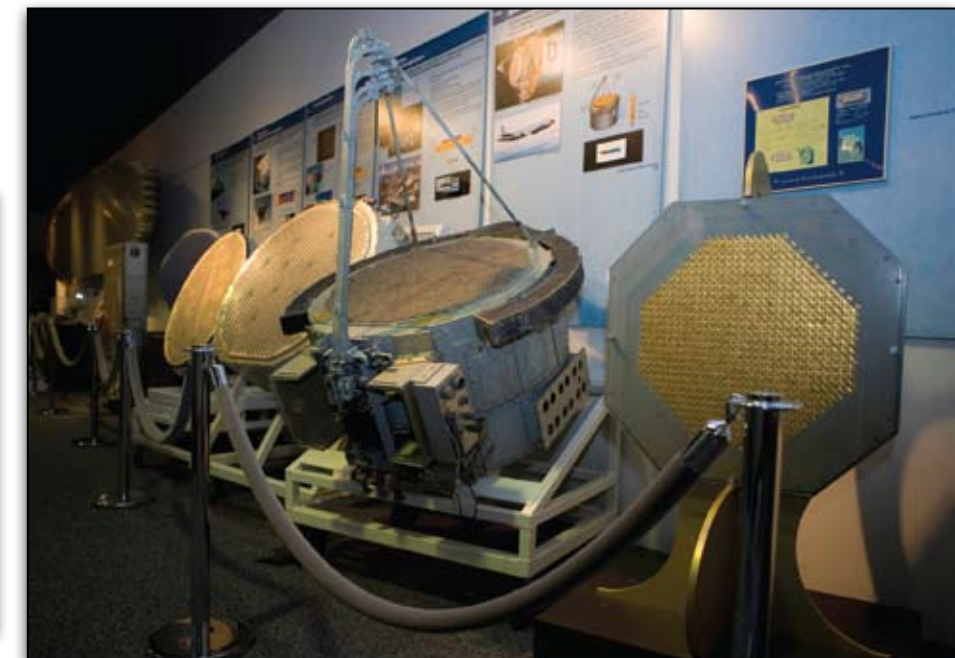
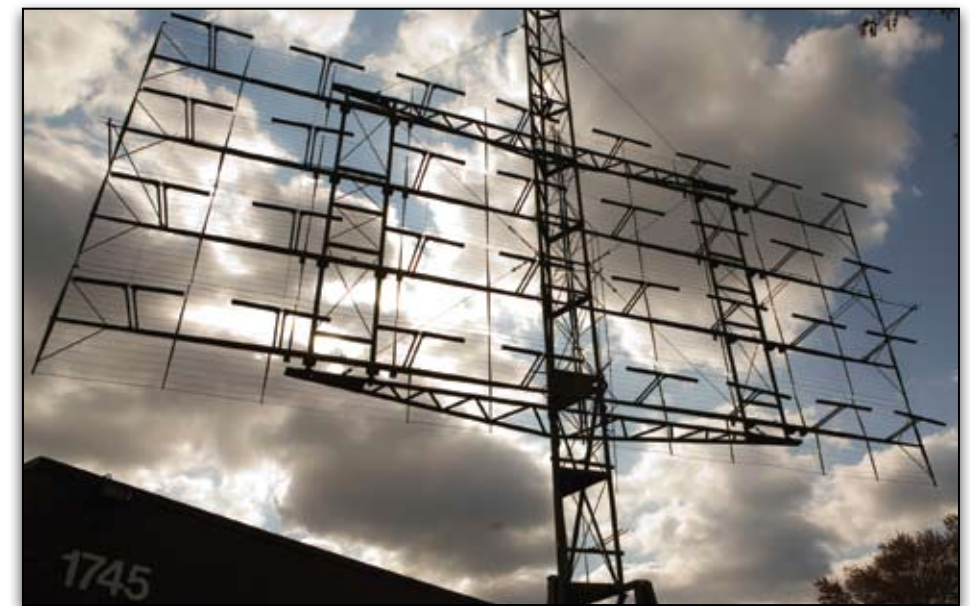
Various telegraph keys used for Morse Code

Pearl Harbor with the radar-trailer-mock-up, or bridge the gap between early airborne radar applications and Doppler radars to the more modern Phased Array antennas used by today's aircraft.

The largest collection of electronic countermeasures in the world enables visitors to learn about undersea warfare with the Sonar display, or check out their virtual displays for a look at body heat through the eyes of an infra-red camera. Visitors can also walk on the moon with the Lunar Camera that was used in the Apollo 11 mission, which is still operational to this day. While in the space exhibit, one can learn about the various space sensors and satellites on display. An extensive library of publications, manuals and drawings of out of service defense electronics, including World War II radar manuals are also on display.

The Historical Electronics Museum, located at 1745 West Nursery Road in Linthicum, MD, is open from 9 a.m. to 3 p.m. Monday through Friday, and from 10 a.m. to 2 p.m. Saturday. Admission is free. For more information, call 410-765-0230, or visit [www.hem-usa.org](http://www.hem-usa.org).

(Clockwise from top) SCR-270 antenna, a 1943 reproduction that traced incoming Japanese raid on Oahu, Dec. 7, 1941, is on display at the Historical Electronics Museum. Transit II satellite and Earth receiver, the precursor to modern GPS. Phased array antennas, used on aircraft, are on display at the Historical Electronics Museum. Mock-up of a World War II era radar station, such as that found on Oahu the morning of Dec. 7, 1941.







LEGION OF MERIT

CAPT Vincent F. Giampaolo, NETWARCOM Norfolk



DEFENSE MERITORIOUS SERVICE MEDAL

LTJG Scott K. Childers, 25th Infantry Division  
CTM1 Ian M. Chrisman, NAVIOCOM Maryland  
LTJG Matthew G. Dalton, CJSOTF, Balad, Iraq  
LCDR Peter Giangrasso, Bagram, Afghanistan  
LTJG Jason R. Henderson, Salerno, Afghanistan  
LCDR Aaron L. Hill, Afghanistan  
CTIC Tara D. Jones, NAVIOCOM Misawa  
CTNC Robert W. McCoy, 10th Mountain Division  
CDR John M. Myers, NAVIOCOM Maryland  
ITC Mollie E. Paterakis, NAVIOCOM Hawaii  
YNCS Jon W. Reid, NAVIOCOM Misawa  
CTR1 Justin J. Rivera, NAVIOCOM Hawaii  
ITCS Jason M. Rufa, NAVIOCOM Maryland  
LTJG J. R. Sawyer, 10th Mountain Division  
CDR Gilbert A. Schwab, NAVIOCOM Maryland  
CDR Steven J. Simon, USSTRATCOMCEN Ft Belvoir  
CTTCS Travis J. Trask, NAVIOCOM Hawaii  
LT Kenya Williamson, Multi-National Corps-Iraq



MERITORIOUS SERVICE MEDAL

CAPT Robert Bergman, NETWARCOM Norfolk  
CAPT John Cahillane, NR NAVIOCOM HQ Ft Meade  
CAPT Diana Cangelosi, NAVSOC Point Mugu  
CAPT Gerald Clusen, NR NSGR HQ Fort Worth  
CWO5 Russell Coleman, NETWARCOM Norfolk  
CDR Eugene Costello, NAVCOMTELSTA Naples  
ITCM Peter Diamore, NCTAMS PAC Wahiawa  
CMDCM Brenda DiMichele, NAVIOCOM Suitland  
CMDCM Michael Dollen, NCTAMS PAC Wahiawa  
CDR Randy Gallagher, NRNNWC NET ENG Norfolk  
CAPT Robert Goodwin, Jr., NCTAMS PAC Wahiawa  
CDR Linda Hunter, NAVIOCOM Bahrain  
CAPT Kevin Johnson, NETWARCOM Norfolk  
CDR James Joyner, NAVIOCOM Norfolk  
LCDR Herbert Kaatz, NETWARCOM Norfolk  
CDR Constance Menezes, NR NAVIOCOM Ogden  
CAPT William Overman III, NR NNWC Space  
CDR Thomas Overman, NR NAVIOCOM Ft Lewis  
CAPT Robert Rivera, NAVNETWARGRU Fort Meade  
CAPT John Shapiro, NSGR RCA East  
CDR Linnea Sommer-Weddington, NRNIOC North Isl  
CDR Frederick Sorrentino, NRNIOC San Diego  
CAPT Mark Wilson, NR NAVIOCOM Fort Meade  
CTACM Thomas Wilson, NCDOC Little Creek



AIR MEDAL

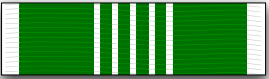
IT1 Jeffrey Beyea, NAVIOCOM Bahrain  
CTI1 Chad Griffel, NAVIOCOM Bahrain  
CTI2 Amy Haun, NAVIOCOM Bahrain  
CTI2 Phillip Horowitz, NAVIOCOM Bahrain  
CTI1 James Johnson, NAVIOCOM Bahrain  
CTI1 Jason Kappel, NAVIOCOM Bahrain  
LTJG Brandon Mahan, NAVIOCOM Bahrain  
CTI2 Lauren Savage, NAVIOCOM Bahrain  
CTI1 Kristi Smith, NAVIOCOM Bahrain  
CTI1 Kristi Smith, NAVIOCOM Bahrain  
ENS Sean Thompson, NAVIOCOM Bahrain



JOINT SERVICE COMMENDATION MEDAL

LT Scott Allen, NAVIOCOM Colorado  
CTR2 Steven Baglio, NAVIOCOM Misawa  
CTI1 Jefferson Barrozo, NAVIOCOM Hawaii  
CTR2 Lucas Bean, NAVIOCOM Maryland  
CTT1 Peter Benson, NAVIOCOM Colorado  
CTT1 Brad Burton, NAVIOCOM Colorado  
CTR1 James Carrillo, NAVIODET Yakima  
CTI2 Geoffrey Clift, NAVIOCOM Hawaii  
CTI2 Carly Cormier, NAVIOCOM Georgia  
CTIC Christine Cots, NAVIOCOM Texas  
CTR2 Amy Cozort, NAVIOCOM Hawaii  
EM1 Joshua Crawford, NAVIOCOM Sugar Grove  
CTR1 Kevin Crockett, NAVIOCOM Maryland  
CTI1 Jessica Doherty, NAVIOCOM Georgia  
CTR2 Nathaniel Evanich, 25th Infantry Division  
CTI2 Wesley Fuller, NAVIOCOM Georgia  
LT Greg Garcia, NAVIOCOM Hawaii  
CTR1 Charles Garrison, NAVIOCOM Maryland  
YN1 Darryll Giddings, NAVIOCOM Hawaii  
CTR1 Bree Green, NAVIOCOM Texas  
CTI2 Michael Gudas, NAVIOCOM Hawaii  
CTI1 Joseph Haas, NAVIOCOM Georgia  
CTTC William Hess, NAVIOCOM Colorado  
CTR1 Troy Kirschstein, NAVIOCOM Maryland  
CTR1 Corey Lively, NAVIOCOM Colorado  
CTI2 Chi Mann, NAVIOCOM Hawaii  
CTM1 Monique McCall, NAVIOCOM Hawaii  
CTN1 Ameki McCuller NAVIOCOM Maryland  
MA2 Tracy Mears, NAVIOCOM Hawaii  
CTI1 Miranda Methven, NAVIOCOM Texas  
CTNC Bobby Mitchell, NAVIOCOM Texas  
CTI2 Heather Nolan, NAVIOCOM Texas  
CTR3 Bethany Nosko, Salerno, Afghanistan  
CTR1 Thomas O'Brien, NAVIOCOM Colorado  
CTR1 Erik Olsson, NAVIOCOM Maryland  
CTR1 Nathan Pappalardo, Salerno, Afghanistan  
CTI2 Benjamin Parsons, NAVIOCOM Georgia  
CTRC Brian Richardson, NAVIOCOM Colorado  
CTNC Keith Rulison, NAVIOCOM Hawaii  
CTR3 Jeremy Saxe, 25th Infantry Division  
LT Bradford Shedwick, NAVIOCOM Maryland  
CTR2 Nathan Shutt, NAVIOCOM Sugar Grove

CTR2 Shane Smith, NAVIOCOM Hawaii  
CTI1 Bridgette Snyder, NAVIOCOM Maryland  
CTI2 Barry Storick, NAVIOCOM Georgia  
CTI2 Levi Stribling, NAVIOCOM Hawaii  
CTN1 Steven Topp, NAVIOCOM Hawaii  
CTT1 Aaron Turner, NAVIOCOM Colorado  
CTI2 Traca Tuthill, NAVIOCOM Georgia  
CTI1 Aslan Walker, NAVIOCOM Georgia  
ITCS Martin Wallace, CFSOCC, As Sayliyah, Qatar  
CTRC Edward Watson, USTRANSCOM  
LTJG Eric Weiss, NAVIOCOM Maryland  
CTR2 Hunter Weiss, NAVIOCOM Misawa  
CTI1 Meredith Young, NAVIOCOM Georgia



ARMY COMMENDATION MEDAL

CTMC Kevin Cooper, 18th Engineer Brigade  
CTTC Richard Vugrin, 2nd Stryker Cavalry Regiment



NAVY AND MARINE CORPS COMMENDATION MEDAL

CTICS Thomas Armstrong, NR NAVIOCOM Camp Parks  
SKC Alphonso Balingit, Jr., NCDOC Little Creek  
LT Melissa Barnes, COMNAVNETWARCOM Norfolk  
IT1 Michael Barnes, NAVIOCOM Hawaii  
LT Torsten Becker, COMNAVNETWARCOM Norfolk  
ITCS Patrick Belvin, NCSC DET Travis AFB  
ITC David Berrien, NCDOC Norfolk  
LT Scott Blue, NAVIOCOM San Diego  
CTM1 Noel Bollman, NAVIOCOM Maryland  
LTJG Christopher Bonine, NAVIOCOM Suitland  
ITC Sharon Bonner, COMNAVNETWARCOM Norfolk  
ITC Ricky Brandon, CMS AA Training Team Norfolk  
ITCS Jarrod Bray, NCTAMS PAC Wahiawa  
ITCS Sharon Brightwell, NCTAMS LANT Norfolk  
ITCS Burome Brumfield, NETWARCOM Norfolk  
CTMCS Brenda Bryan, NAVIOCOM Suitland  
CDR Robert Carlisle NAVIOCOM Norfolk  
Lt Col Jerry Carpenter, USMC, NETWARCOM Norfolk  
SKC Eric Carter, COMNAVNETWARCOM Norfolk  
OSOC Loyd Carter, NCTSI DET TWO Norfolk  
LT Jonathan Cerrito, NAVIOCOM Maryland  
CTT1 Shane Chafin, NETCENWARGRU Fort Meade  
LT Timothy Chesser, NAVIOCOM Suitland  
ET1 Ty Clark, COMNAVNETWARCOM Norfolk  
CTTC Shawn Connis, NAVIODET Kaneohe Bay  
LT Thomas Crow, NAVIOCOM Pensacola  
CTIC William Csontos, NAVIOCOM Georgia  
LT Christian Davis, NAVIOCOM Georgia  
CTTCS Michael Davis, NETWARCOM Fort Meade  
LT Alice DeStasio Brickhouse  
COMNAVNETCENWARGRU Fort Meade  
ITC Steven Ditchkofsky, NAVIOCOM Bahrain  
OSCS Steven Douglas, NCTSI DET One  
LT Anthony Everhart, COMUSNAVCENT Bahrain  
CTNC Alan Gann, NR NAVIOCOM San Diego  
CDR Mary Ann Giese, COMNAVNETWARCOM Norfolk

CTR1 Brian Goble, NR NAVIOCOM Fort Lewis  
LCDR Michael Gregoire, NAVIOCOM Suitland  
ITC Brian Guilfoyle, NAVIOCOM Misawa  
ITC Jeremy Haas, NCTAMS PAC Wahiawa  
CTT1 Nicolette Hensley, NAVIOCOM Norfolk  
MA1 Felicia Hartville, NAVIOCOM Hawaii  
CWO3 Steven Hazelwood, NAVIOCOM Georgia  
CTR1 Dwayne Hensley, CIDACTRESIN Pensacola  
CTT1 Nicolette Hensley, NAVIOCOM Norfolk  
ETC Eric Hornecker, COMNAVNETWARCOM Norfolk  
CTRCS Lewis Hymon II, NAVIOCOM Suitland  
CTICS Jerry Iman, NAVIOCOM Hawaii  
CTTC Marius Jefferson, NAVIOCOM Hawaii  
ETC Christopher Jennings, NCTAMS PAC Wahiawa  
LTJG Nicholas Jensen, NAVIOCOM San Diego  
LT Ventura Jimenez, Jr., NR NAVIOCOM North Island  
CTTCM Benito Jimeno, Jr., NR NIOC North Island  
CTT1 Stephen Johnson, NAVIODET Kaneohe Bay  
LT Mark Jones, NAVIOCOM Georgia  
CTTC Valerie Kelly, NAVIOCOM Norfolk  
LCDR Edward Kruk, NCTAMS PAC Wahiawa  
LT Jeffrey Kuzniewski, NAVIOCOM Norfolk  
LCDR Sylvia Layne, COMNAVNETWARCOM Norfolk  
CTTC Michael Lewis, NAVIOCOM Norfolk  
CWO2 Robert Long, NAVIOCOM Georgia  
CTTCM Michael Longhi, NR NAVIOCOM St. Louis  
YNCS April Maletz, CID-ARI Corry Station  
LT Henry Martinez II, NAVCOMTELSTA San Diego  
CTI1 John Massey, NAVIOCOM Georgia  
CTRC Craig McClanahan, NAVIOCOM Georgia  
LT John McElhannon, NAVIOCOM Georgia  
ITC Dana McFarlane, NAVIOCOM San Diego  
LCDR Shawn McGinnis, NAVIOCOM Hawaii  
LT Kevin McHugh, NAVIOCOM San Diego  
LCDR Jane McNeely, NCTAMS PAC Wahiawa  
CTTCS Louis Mendez, Jr., NAVIODET Kaneohe Bay  
CDR Robert Morean, NAVNETWARGRU Fort Meade  
CTMCS Samuel Morrison, Jr., NAVIOCOM Bahrain  
IT1 Derek Moses, NAVIOCOM Maryland  
CDR Christopher Nerney, NRNNWC NET ENG Norfolk  
CS1 Arthur Oden II, COMNAVNETWARCOM Norfolk  
LCDR Billy Osborne, Jr., NR NAVIOCOM Orlando  
CTTC Thomas Owen III, NAVIOCOM Norfolk  
CTNCM Ralph Pieper, CID-ARI Corry Station  
LCDR Christopher Rayburn, NAVIOCOM Georgia  
ETCS Mark Rediger, NCTAMS LANT Norfolk  
CTRCS Lynda Reid, NAVIOCOM Misawa  
CDR William Rhea, NCTAMS LANT Norfolk  
CTIC Hector Rivera, NAVIOCOM Georgia  
LTJG Jeffrey Robinson, NAVIOCOM Maryland  
IT1 Annette Salas, NAVIOCOM San Diego  
CTR1 Gilbert Sanchez, NAVIOCOM Georgia  
HTCS Terry Schritter, NAVIOCOM San Diego  
CTI1 Kristin Scott, NAVIOCOM Maryland  
CTMCS Brian Sharkey, NAVIOCOM Hawaii  
CTRCS Johnnie Shields, NAVIOCOM Texas  
CTNCS Mark Smith, NCDOC Norfolk  
ITCS Kelly Spears, NAVCOMTELSTA GUAM  
LT Ralph Stephens, NCTAMS PAC Wahiawa  
LCDR Bienvenido Tapang, Jr., NCTS Far East Yokosuka  
CTR1 Anthony Taylor, NAVIOCOM Georgia  
LN1 Judith Thompson, NAVIOCOM Georgia  
CTTCS Keith Upchurch, NAVIOCOM Norfolk  
LT Linda Upshaw, NCTAMS LANT Norfolk  
LCDR Marcus Vallot, NR NAVIOCOM San Diego  
ITC Lee Washington, NCTAMS LANT Norfolk

CTTCS John Wendt, NAVIOCOM Maryland  
LT Scott Wilson, NAVIOCOM Hawaii



JOINT SERVICE ACHIEVEMENT MEDAL

IT3 John Ashley, NAVIOCOM Sugar Grove  
CTT2 Stephen Barton, NAVIOCOM Colorado  
CTI2 David Berger, NAVIOCOM Georgia  
CTI1 Matthew Bush, NAVIOCOM Maryland  
CTR3 Theodore Chell, NAVIOCOM Hawaii  
CTI2 Robert Childs, NAVIOCOM Maryland  
CTN1 James Cooper, NAVIOCOM Maryland  
CTT2 David Crabtree, NAVIOCOM Colorado  
LT Wirt Cross, NSA/CSS Fort Meade  
CTT1 James Dement, NAVIOCOM Colorado  
IT2 Paul Dillon, NAVIOCOM Hawaii  
IT2 Elijah Ely, NAVIOCOM Georgia  
IT2 Cynthia Feliciano, NAVIOCOM Hawaii  
CTR1 Ronald Frank, Bagram, Afghanistan  
IT3 Richard Gifford, NCR Bagram, Afghanistan  
CTR1 Brian Girard, NAVIOCOM Colorado  
CTI2 Cody Grassman, NAVIOCOM Hawaii  
CTR3 Jacob Hansen, NAVIOCOM Colorado  
CTT2 Lachell Heartley, NAVIOCOM Colorado  
CTR2 Demarkus Horton, NAVIOCOM Georgia  
CTR2 Joshuwa Howell, NAVIOCOM Hawaii  
CTI2 Lindsey Hoying, NAVIOCOM Georgia  
CTT2 Meghan Hrncir, NAVIOCOM Colorado  
IT2 Sherika Jenkins, USEUCOM Joint Analysis Center  
CTM2 Crystal Lampkin, NAVIOCOM Hawaii  
CTR3 Kris Lapham, NAVIOCOM Georgia  
CTR2 Erika Lawton, NAVIOCOM Maryland  
CTN2 Courtney Lobo, NAVIOCOM Maryland  
CTR2 Aaron Massey, NAVIOCOM Hawaii  
CTR2 Jeremiah McLean, NAVIOCOM Maryland  
CTR2 Wacey Meyer, NAVIOCOM Colorado  
CTT2 Sean Millerd, NAVIOCOM Colorado  
CTT1 Mavis Milligan, NAVIOCOM Colorado  
CTI2 Steven Minson, NAVIOCOM Georgia  
IT2 Latoya Mitchell, NAVIOCOM Hawaii  
CTI1 Jeanenne Montoya, NAVIOCOM Georgia  
IT2 Tonya Moore, NAVIOCOM Hawaii  
IT2 Yakeisha Morgan, NSA/CSS Fort Meade  
CTR3 Bethany Nosko, NAVIOCOM Misawa  
CTT2 Andrea Place, NAVIOCOM Hawaii  
CTR2 Nicholas Porter, NAVIOCOM Colorado  
YN2 Donna Powers-Brown, NAVIOCOM Maryland  
CTM2 Scott Rand, NAVIOCOM Sugar Grove  
CTT1 Kurt Sauer, NAVIOCOM Colorado  
CTT1 Matthew Saxton, NAVIOCOM Colorado  
CTI2 Michael Shelton, NAVIOCOM Georgia  
CTT1 Coey Sipes, NAVIOCOM Colorado  
CTT1 Christopher Slater, NAVIOCOM Colorado  
CTM2 Shacarla Smith, NAVIOCOM Hawaii  
CTR3 Paul Stalma, NAVIOCOM Colorado  
CTM2 Jonathan Stevens, NAVIOCOM Hawaii  
CTI2 Troy Stiltner, NAVIOCOM Georgia  
CTR1 Sean Stiverson, NAVIOCOM Sugar Grove  
CTR2 Angela Strong, NAVIOCOM Colorado  
CTT1 Angelia Sykes, NAVIOCOM Colorado  
CTI2 Gregory Van Giezen, NAVIOCOM Georgia  
YN3 Tyquan Vereen, NAVIOCOM Texas

CTI2 Jesse Wehrenberg, NAVIOCOM Georgia  
CTI2 Sarah Werner, NAVIOCOM Georgia  
CTM2 Jeremy Wilkins, NAVIOCOM Hawaii  
CTI2 Brock Wilson, NAVIOCOM Georgia  
CTI1 Linda Yoon, NAVIOCOM Hawaii  
CTN2 Leo Zerhusen, NAVIOCOM Georgia



ARMY ACHIEVEMENT MEDAL

CTNC Robert McCoy, Bravo Co, Brig Spec  
Trps Bn



NAVY AND MARINE CORPS ACHIEVEMENT MEDAL

CE1 Noel Abadilla, NAVCOMTELSTA Bahrain  
LT Bradley Abramowitz, NAVIOCOM Texas  
CTI1 Miguel Acosta, NAVIOCOM Texas  
CTR1 Michael Aldridge, NAVIOCOM Hawaii  
IT2 Brent Alejandro, NAVCOMTELSTA San Diego  
IT3 Michael Allen, NCTS SD SCU Det  
Oklahoma City  
CTT2 Jonathan Aluise, NAVIOCOM Hawaii  
CTM1 Ginger Archer, NAVIOCOM Pensacola  
ET2 Geraro Arizala, NAVCOMTELSTA Bahrain  
IT2 Lakora Armstrong, NCTAMS PAC Wahiawa  
LT Marvin Atkins, NETWARCOM Norfolk  
CE1 Dedric Baker, NAVCOMTELSTA Bahrain  
IT1 Tracey Banks, NNWC GNOC Det Norfolk  
IT1 Carlos Barnes, NCTAMS LANT Det  
Guantanamo  
CTTCS Larry Bartlett, NR NIOC Minneapolis  
CTR2 Lucas Bedard, NAVIOCOM Bahrain  
CTR1 Sabrina Bell, NAVIOCOM Hawaii  
CTIC Anibal Bello, NAVIOCOM Texas  
CTRSN Sean Benge, NAVIOCOM Maryland  
IS1 Jay Besterfeldt, NETWARCOM Norfolk  
IT1 Ernest Biddle, NAVCOMTELSTA Bahrain  
SK1 James Bilderback, NAVIOCOM Norfolk  
QM2 Charon Bingham, NCTAMS LANT Norfolk  
CTR1 Ryan Birn, NR NAVIOCOM Greensboro  
CTI2 Ian Blubaugh, NAVIOCOM Bahrain  
CTT2 Karl Bortz, NETWARCOM Norfolk  
ET2 Michael Boyett, NCTS Far East Det Okinawa  
CTRC Mahlon Braden, NAVIOCOM Hawaii  
CTT2 Clayton Braswell, NAVIOCOM Georgia  
CS2 Joseph Breedlove, Jr., NMCB SEVEN  
CTT1 Thomas Bremer, NAVIODET Brunswick  
IT2 Keith Bridges, NAVIOCOM Maryland  
LT John Brienza, NAVSOC Point Mugu  
CTT1 Ryan Brinkerhoff, NAVIOCOM Norfolk  
IT1 Hakim Bristow, NETWARCOM Norfolk  
IT2 Bradford Brown, NAVCOMTELSTA Naples  
IT1 Todd Brunner, NAVCOMTELSTA Bahrain  
IT2 Angela Bryant, NCMS Washington D.C.  
IT2 Joshua Caldera, NAVIOCOM Hawaii  
IT2 Shaun Campbell, NCTAMS PAC Det  
Puget Sound



LTJG Anthony Cantafio, Jr., NIOC Pensacola  
SK2 Layln Carabeo, NAVIOCOM Hawaii  
IT2 Jose Carcana, NAVCOMTELSTA San Diego  
IT2 Jose Carcana, NAVCOMTELSTA San Diego  
CTR1 Daniel Carlisi, NAVIODET Chesapeake  
IT2 Joshua Carter, NCTAMS PAC Wahiawa  
SK1 Robin Castro, NAVIOCOM Texas  
SKC Archimedes Cayanan, NCTS Bahrain  
IT1 Jermell Charles, NAVCOMTELSTA Bahrain  
IT2 Neal Chauhan, NAVCOMTELSTA Bahrain  
YNC Melinda Clark, NETWARCOM Norfolk  
IT2 Joshmeal Cobb, NAVIOCOM Suitland  
IT1 Taysha Colon, NETWARCOM GNOC DET Norfolk  
CTR1 Cynthia Condiff, NAVIOCOM Georgia  
CWO3 James Cooper, NAVIOCOM San Diego  
IT2 Edward Cortez, NAVCOMTELSTA Bahrain  
IT1 Paul Costello, NAVIOCOM Maryland  
ET1 John Cottrill, NCTS FE Det Chinhae  
LTJG Bradley Crocker, NAVIOCOM Hawaii  
CTR1 Ryan Dacy, NAVIOCOM Misawa  
SKC Mariaalthea Dambra, NAVIOCOM Hawaii  
YNC Anthony Darby, NAVIOCOM Pensacola  
ET2 Thomas Darrohn, NAVCOMTELSTA Naples  
LT Nicholas Dauner, NAVIOCOM Suitland  
IT2 Alfred DeJesus, NAVCOMTELSTA San Diego  
CTI1 Josephine Delauney, NAVIOCOM Norfolk  
PS1 Dawn Demacos, NETWARCOM Norfolk  
CTN2 Shawn Dencklau NAVIOCOM Norfolk  
HM2 Larry Desouza NAVIOCOM Hawaii  
ET2 Ronald Dixon, NCTAMS PAC Wahiawa  
IT2 Shawn Douglas, NCTAMS PAC Wahiawa  
IT2 Kevin Drayton, NCTAMS PAC Wahiawa  
CTR1 Joshua Dunga, NAVIOCOM Texas  
CTR1 Demetrius Dunn, NAVIOCOM Maryland  
IT2 Daniel Dyer, NAVCOMTELSTA Bahrain  
CTT2 Paul Dyjak, NAVIOCOM Hawaii  
IT3 Dliia Edwards, NAVIOCOM Maryland  
CTT2 Kerstin Elliott, NAVIOCOM Norfolk  
IT2 Rhoel Espinosa, NCTAMS PAC Wahiawa  
CTR1 Jason Estrello, NETWARCOM Norfolk  
CTR1 Christopher Farrier, NAVIOCOM Georgia  
IT1 Micheal Ferrol, NETWARCOM Norfolk  
CTT2 Mary Finn, NAVNETWARGRU Fort Meade  
IT2 George Fisher, NAVCOMTELSTA Bahrain  
ETC Benjamin Fletcher, NCTS Bahrain  
CTI1 Joyelle Foley, NAVIOCOM Georgia  
HT2 Christopher Foster, NAVIOCOM Norfolk  
ET3 Keith Fox, NAVCOMTELSTA Naples  
IT1 Aaron Franks, NAVCOMTELSTA Naples  
LTJG Daniel Frias, NAVIOCOM Texas  
CTR2 Jason Fryer, NAVIOCOM Maryland  
CTR1 Lerone Gamble, NAVIODET Chesapeake  
YN2 Latosha Gibbs, NAVIOCOM Maryland  
ET3 Lekeisha Golden, NAVCOMTELSTA Bahrain  
IT1 Magda Gomez, NMCI Det San Diego  
CE1 Alphonso Gomillion, NCTS Naples  
IT1 Johnny Gonzales, NCTAMS PAC Wahiawa  
CTR2 Jeffrey Graham, NAVIOCOM Georgia  
CTI1 Brandon Granger, NAVIOCOM Georgia  
ITSN Eric Graves, NAVIOCOM Georgia  
CTT2 Devin Green, NAVIOCOM Hawaii  
CTR1 Jason Greer, NAVIOCOM Texas  
IT2 Wilder Guerra, NAVCOMTELSTA Naples  
CTR1 Jimmy Hansen, NETWARCOM Fort Meade  
CTN2 Alex Harris, NAVIOCOM Pensacola  
IT2 Casey Hathaway, NCTAMS LANT Det Rota  
IT1 Berkley Haywood, Jr., NCTAMS PAC Wahiawa  
IT2 Nils Hellstrom, Jr., NCTAMS PAC Wahiawa  
CTI2 Ryan Hendricks, NAVIOCOM Georgia

LT Justin Hendrix, NCTSI San Diego  
LT Scott Higgins, NR NNWC NET ENG Norfolk  
YN1 Angela Hilliard, NAVIOCOM Norfolk  
CTR1 Daniel Hof, NAVIOCOM Georgia  
ET2 Christian Holinsworth, NCTAMS PAC Wahiawa  
ITC David Holm, NAVCOMTELSTA Bahrain  
ET1 Fred Holmes, NAVIOCOM Norfolk  
CTT1 Brandon Hoth, NAVIOCOM Texas  
ET2 Chad Howard, NCTAMS PAC Wahiawa  
LT Kathy Huang, NCTAMS PAC Wahiawa  
CTR2 Eric Hubert, NAVIOCOM Maryland  
YN1 Anthony Iadevaia, NAVIOCOM Texas  
CTI1 Hopi Jagger, NAVIOCOM Maryland  
YN2 Travis James, NCTAMS LANT Det Rota  
CTN1 Jeremiah Johnson, NAVIOCOM Maryland  
CTI1 Robert Johnson, NAVIOCOM Misawa  
IT2 Melvin Johnson, Jr., NCTS Bahrain  
SK1 Joseph Jones, NAVIOCOM Bahrain  
CTRSN Frank Jordan, NAVIOCOM Bahrain  
CTI1 Joshua Karp, NAVIOCOM Misawa  
FC2 Eric Kemp, NCMS Washington D.C.  
LT Casandra Koistinen, NAVIOCOM Hawaii  
CTR2 Timothy Kuiper, NAVIODET Chesapeake  
IT2 Kenneth Kurz, NCTAMS PAC DET Puget Sound  
IT2 Alex Lacsina, NAVCOMTELSTA San Diego  
CTNC Jose Lamourt, NETWARCOM Fort Meade  
ET1 Eric Lauritzen, NCTAMS PAC Wahiawa  
IT1 Geoffrey Lavender, NAVIOCOM Suitland  
CTR1 Samantha Lavine, NR NIOC Camp Parks  
ET2 Bryan Lay, NCTAMS PAC Wahiawa  
CTR1 James Leroux, NAVIOCOM Maryland  
YN1 Marty Levant, COMNAVFORKOREA Det Chinhae  
CTI1 Olga Levkovich, NAVIOCOM Maryland  
IT2 Chaquania Lewis, NETWARCOM Norfolk  
CTI1 Richard Linsley III, NAVIOCOM Suitland  
CTR2 Curtis Lowry, NAVIOCOM Georgia  
CTR2 Curtis Lowry, NAVIOCOM Georgia  
IT2 Adriana Lynch-Maldonado, NCTS Naples  
ITC Rolando Macapagal, NCTAMS PAC Wahiawa  
DET Andre Mack, NAVCOMTELSTA Bahrain  
LT Bryan Mack, NAVIOCOM Georgia  
CTR1 Wilson Mai, NAVIOCOM Misawa  
CTTC Jay Manning, Jr., NAVIOCOM San Diego  
CTT1 Eric Marcotte, NAVIOCOM Georgia  
IT2 Jean Maroney, NCTAMS PAC Wahiawa  
IT2 Celeste Martin, NCTAMS PAC Wahiawa  
IT2 Cynthia Martinez, NCTAMS PAC Wahiawa  
CTI1 Zachary Matheson, NAVIOCOM Georgia  
IT1 Jason Mayes, NAVCOMTELSTA Naples  
YN2 Jeffry Mazurek, NMCS Washington D.C.  
CTR2 Kyle McCafferty, NAVIOCOM Georgia  
SK2 Samuel McDanal, NAVIOCOM Hawaii  
IT2 Charles McKenzie, NCTS Bahrain  
IT2 Dakota McNaughten, NAVIOCOM Hawaii  
IT2 Lawrence Meddleton, Jr., NCTAMS LANT Norfolk  
CTI1 Gloriaa Mejia, NAVIOCOM Misawa  
EO2 Cory Merrell, NAVIOCOM Hawaii  
LTJG Vincent Mettle, NAVIOCOM Maryland  
IT1 Gary Miller II, NMCI Det San Diego  
LTJG Glenn Miller, NAVIOCOM Hawaii  
OS1 Jason Miller, NAVIOCOM San Diego  
CTI1 Katherine Mitcham, NAVIOCOM Georgia  
CTN2 Bryce Mitchell, NAVIOCOM Norfolk  
CTI2 Nicolas Mora, NAVIOCOM Georgia  
IT2 Carlos Moreira, NAVCOMTELSTA Naples  
IT2 Thomas Moretto, NAVCOMTELSTA Bahrain

IT2 Brian Morgan, NAVCOMTELSTA Bahrain  
ET1 David Moss, NAVCOMTELSTA Bahrain  
ET1 Jeremiah Mullikin, NETWARCOM Norfolk  
ET1 Mickael Munz, NAVCOMTELSTA Bahrain  
CTI2 John Murphy, NAVIOCOM Texas  
CTR2 Joseph Myers, NAVIOCOM Hawaii  
IT1 Ryan Nelle, NAVIOCOM Texas  
LT Joshua Nelson, NAVIOCOM Georgia  
IT1 Stephen Nemeth III, NAVIOCOM Suitland  
CTR1 Robert Norman, NAVIOCOM Hawaii  
IT2 Jacob Nussbaum, NCTAMS LANT Norfolk  
YNCS Patricia O'Neal, NR NIOC Camp Parks  
IT1 Gary Orr, NETWARCOM GNOC Det Norfolk  
CTN2 Adam Overman, NAVIOCOM Norfolk  
IT2 Christopher Parker, NCTAMS LANT Det Rota  
CTM1 Lucas Patton, NAVIODET Chesapeake  
IT1 Adam Peplinski, NAVCOMTELSTA Naples  
CTT2 Phillip Perez, NAVIOCOM Hawaii  
LTJG Michael Perkins, NAVIOCOM Hawaii  
IT1 Craig Perry, NAVCOMTELSTA Bahrain  
CTR3 Charles Peterson, NAVIOCOM Maryland  
IT1 Jacob Poklinkoski, NAVCOMTELSTA Bahrain  
CTR2 Eric Polasek, NAVIOCOM Hawaii  
ET1 Frazier Pollard, NCTAMS LANT Norfolk  
YN2 Kelly Poole, NAVIOCOM Georgia  
IT2 Michelle Poston, NAVCOMTELSTA Bahrain  
ETCS Kevin Powers, NCTAMS PAC Wahiawa  
IT1 Rodney Price, NCTAMS PAC Det Puget Sound  
YN2 Lonnie Ragland III, NAVIOCOM Maryland  
CE1 Bienvenido Ramos, NCTS Bahrain  
IT1 Chad Rayner, NCTAMS PAC Wahiawa  
CTR1 Jerome Reed, NAVIOCOM Texas  
LCDR Arthur Requina, NR NIOC NET ENG Norfolk  
CTRC John Rhodes, Jr., NAVIOCOM Texas  
CTT1 William Richards, NAVIOCOM Georgia  
CTR1 Kenneth Richter, USS Preble (DDG 88)  
CTTC Gregory Riddle, NAVIOCOM Norfolk  
CTI1 Alexis Riektins, NAVIOCOM Hawaii  
SKC Omar Rimmer, NAVCOMTELSTA Bahrain  
CTRCS Anthony Rizi, COMCARSTRKGRU TEN  
CTT1 Edward Roberson, NAVIOCOM Bahrain  
CTR1 Brian Robinson, NAVIODET Alice Springs  
IT1 Jamone Robinson, NAVCOMTELSTA Bahrain  
IT1 Robert Robinson, NETWARCOM Norfolk  
CE2 Maria Rodriguez, NAVCOMTELSTA Naples  
IT1 David Rosinski, NCTAMS LANT Det Rota  
CTN2 Chad Rusink, SOTF West  
CTN2 Chad Rusink, NAVIOCOM Texas  
CTR2 Waheed Sahraie, NAVIOCOM Texas  
CTR1 John Salloum, NAVIOCOM Georgia  
CTR1 Miriam Samuels, NAVIOCOM Georgia  
CTI1 Laurence San Juan, NR NAVIOCOM Hawaii  
MA1 Tony Sanchez, NCTAMS LANT Det Rota  
LT Michael Savi, NAVIOCOM Norfolk  
CTR1 Danielle Scarbrough, NAVIOCOM Georgia  
IT2 Greg Schreiner, NAVCOMTELSTA Naples  
CTR2 Riana Scott, NAVIOCOM Hawaii  
SK2 Nicholas Seay, NAVIOCOM San Diego  
CTR1 Joey Sera, NAVIOCOM Georgia  
OS2 Lena Shaw, NCTAMS LANT Norfolk  
IT1 Nikita Shiller, NETWARCOM Norfolk  
CTR1 Roger Shreeve, NAVIOCOM Suitland  
CTR2 Felicia Shuba, NAVIOCOM Norfolk  
IC1 Nicholas Siever, NCTAMS LANT Det Rota  
YN2 John Slappy, Jr., NCMS Washington DC  
CTT1 Kenneth Slaten, NAVIOCOM Colorado  
ET2 Thomas Sloan, NAVCOMTELSTA San Diego  
CS3 Maurio Smith, NAVIOCOM Georgia  
IT2 Russell Smith, NAVCOMTELSTA Naples

IT1 Patrick Spears, NCDOD Norfolk  
IT1 John Spence, NAVCOMTELSTA Naples  
IT2 Nicholas Spicer, NCTAMS PAC Wahiawa  
IT2 Joanne Stanley, NCTAMS LANT Norfolk  
CTI1 Laura Stout, NAVIOCOM Texas  
ITC Robert Subacius, NR NETWARCOM NET ENG Norfolk  
CTR1 Joshua Swick, NAVIOCOM Maryland  
YN2 Jeremy Taylor, NAVCOMTELSTA Bahrain  
IT1 Ginger Tejada, NCTAMS PAC Det Puget Sound  
YN2 Yolanda Thomas, NETWARCOM GNOC Det Norfolk  
LT Christopher Tighe, NR NIOC North Island  
CTI1 Linda Tighe, NR NAVIOCOM North Island  
CTR3 Ryan Turley, NAVIOCOM Texas  
IT3 Brian Turner, NAVCOMTELSTA Naples  
CTRC Sandra Turner, NAVIOCOM Hawaii  
CTR2 Krystal Tyler, NAVIOCOM Maryland  
ET3 Jesse Underwood, NAVCOMTELSTA Bahrain  
CTMC Jeffery Urness, NAVIOCOM Suitland  
CTN1 Joshua Vallot, NAVIOCOM Pensacola  
YN1 Brenda Vann, NAVIOCOM Hawaii  
IT2 Ernest Vasquez, NAVCOMTELSTA Naples  
CTM2 Nathan Vicente, NAVIODET Chesapeake  
LTJG Robert Virden, NAVIOCOM Misawa  
ITC Leroy Wallace, NCTAMS LANT Norfolk  
IT3 Dominic Ward, NAVIOCOM Maryland  
IT3 Nikole Warren, NAVCOMTELSTA Naples  
YN1 Dwayne Watson, NCTS Far East Yokosuka  
CTNC Gwendolyn White, NAVIOCOM Pensacola  
ET1 Ronald White, NCTS SD SCU Det Oklahoma City  
MA1 Jonathan Wicker, NCTAMS PAC Wahiawa  
CTT2 William Wilcox, NAVIOCOM Georgia  
CTR2 Christopher Williams, NAVIOCOM Norfolk  
CTR2 Christopher Williams, NAVIOCOM Hawaii  
ET1 Douglas Williams, NAVCOMTELSTA Naples  
IT1 Eric Williams, NCTAMS PAC Wahiawa  
LTJG Bradley Williford, NAVIOCOM Hawaii  
CTT1 Michael Wilson, NAVIOCOM Hawaii  
CTN2 Paul Wise, NAVIOCOM Pensacola  
CTT1 Karla Wolford, NAVIOCOM Hawaii  
CTR1 Daniel Womack, NAVIOCOM Suitland  
LT Herbert Woods, NETWARCOM Norfolk  
IT1 Belinda Wray, NCTAMS PAC Wahiawa  
CTR1 Richard Wyatt, NAVIOCOM Colorado  
IT1 Rosalyn Zabala, NCTAMS PAC Wahiawa



**MILITARY OUTSTANDING  
VOLUNTEER SERVICE MEDAL**

YNC Anthonio Brockington, NAVIOCOM Suitland  
ITCS David Kelly, NAVCOMTELSTA Italy  
LCDR Sylvia Layne, NETWARCOM Norfolk  
CTR1 Wilson Mai, NAVIOCOM Misawa  
CTI1 Gloriaa Mejia, NAVIOCOM Misawa  
CTR1 Joshua Roundy, NAVIOCOM Misawa  
YN1 Christina Square, NAVIOCOM Misawa  
YN1 Kicha Wylie, USS Dwight D. Eisenhower (CVN 69)

**CIVILIAN LENGTH OF  
SERVICE AWARDS**

Jerrold Becklehimer, NNWC Fort Meade - 40

James Clark, NNWC Fort Meade - 40  
Ronald Furlong, NNWC Fort Meade - 40  
Derek Griffin, NNWC Fort Meade - 40  
David Burns, NCTAMS LANT Det Cutler - 35  
Kevin Carter, NNWC Fort Meade - 35  
Nancy Rantanen, NETWARCOM Norfolk - 30  
Sharon Slaughter, NCTAMS LANT Norfolk - 30

J Mildred Swanger, NCTS Jacksonville - 30  
Judith Bonds, NCTAMS LANT Norfolk - 25  
Ruth Fox, NETWARCOM Norfolk - 25  
Sean Cunningham, NNWC Fort Meade - 20  
Christina Elliott, NCTS Jacksonville - 20  
Judith Richards, NCTAMS LANT Norfolk - 20  
Brian Waller, NETWARCOM Norfolk - 20

# NCTAMS LANT Sailor Earners Gold Disk Award

Story by Gievanna Jones  
Photo by OS3 C. Hunter

ET2 Michael Paul Hurst, from the Naval Computer and Telecommunications Area Master Station Atlantic Norfolk, was recently awarded the Chief of Naval Operations (CNO) Monthly Gold Disk Award.

As a major contributor in expanding the Navy and Marine Corps Miniature/Micro-miniature and Module Test and Repair Program, Hurst directly improved the operational capabilities of both agencies.

Specifically, he developed a vital circuit card diagnostic capability that will result in enhanced equipment availability to Navy and Marine Corps commands throughout the Fleet and save the Department of the Navy thousands of dollars in repair costs.

He also worked to improve the availability of the Digital-to-Synchro Converter Board for the 10-4100 Indicator Drive Unit of the Depth Control panel. His efforts will ensure this vital system remains battle-ready.



(Left to right) CAPT Lee Johnson, NCTAMS LANT CO, presents ET2 Michael Hurst the CNO Gold Disk Award.



# DIVERSITY

## Asian-Pacific Heritage Month

## Asian-Pacific Sailors Enhance Diversity at NETWARCOM

By MC2(SW) Christopher J. Koons

In today's multicultural society, few institutions reflect America's growing ethnic diversity more than the United States Navy. And few ethnic groups are represented better within the Navy than those of Asian-Pacific descent.

The Navy is currently the federal government's largest employer of Asian-Pacific Islanders, with nearly 18,000 of its employees belonging to this group. Of those serving at NETWARCOM, many credit their success in the Navy to the values they learned growing up in their respective cultures.

CDR Quoc Tran, a native of Vietnam, grew up in a military family. Tran was only 7 years old in 1975 as his home city of Saigon, then the capital of South Vietnam, was captured by the North Vietnamese Army, bringing an end to the Vietnam War. He and his family then endured a long odyssey to their new home in the United States.

"We got out of Saigon on a merchant vessel and first went to a refugee camp in Guam," said Tran. "From there, we were transferred to another refugee camp in Fort Chaffee, AK. Eventually, we were brought to New Castle, PA, by a Christian church group."

Eventually, Tran's family settled in Virginia, which allowed him to be sponsored when for the U.S. Naval Academy Preparatory School in 1985. "Senator John Warner decided to sponsor me," he said.

"My father had been in the South Vietnamese army and my older brother went to the Air Force Academy when we came over here, so I decided to join the Navy to make it a complete picture," said Tran.

Because of his background and the opportunities his adopted country has offered him, Tran said he is very proud to serve in the Navy.

"The freedom that this country provides means a lot to my family and me," he said. "One way to pay America back is to serve in the military to protect our new-found freedom. Without America, my family would not be where it is right now."

Tran, who is married to another Vietnamese immigrant and has two young children, also credits his Roman Catholic faith with imbuing in him the desire to succeed.

"I go by the example set by our Lord Jesus Christ, so I strive to live a peaceful and meaningful life," he said.

Tran finally got a chance to return to his homeland in 2005 when USS Gary (FFG 51), with Tran serving as

executive officer, made a port call to Ho Chi Minh City, Vietnam, (formerly Saigon).

"Visiting the place where I was born was a dream come true," said Tran. "I visited some of my relatives who still lived there, as well as some of my wife's relatives. It went by so fast, but I will cherish the visit for the rest of my life."

Another NETWARCOM officer of Asian-Pacific decent, CAPT Lourdes Neilan, said the common values of the Filipino people are the same values she has embraced to sustain her successful Navy career.

"We're a very hard-working society, and my father raised me to always value what I do," said Neilan, a native of Manila, capitol city of the Philippines. "He taught me to appreciate life's good things and learn from my mistakes."

Neilan emigrated with her family to the U.S. in 1971, and like Tran, had a father who served in the military.

"My father was a second class mess specialist when he retired from the Navy," she said. "He started out as Captain's Steward."

Also like Tran, Neilan is a Roman Catholic, and she said that her faith sustains her family when facing life's obstacles. "My children go to Catholic school and my husband is also Catholic," she said. "My faith allows me to examine things ethically and decide what the right thing to do is."

Since she has lived in the U.S. since the age of 14, Neilan considers herself to be more American than Filipino, but she still retains links to her native culture.

"Filipinos value good food, are reliable, loyal, family-oriented and religiously diverse," she said. "I've taught my children to appreciate Filipino culture."

For OSC(SW) Carrie Batiste, having an African-American father and a Japanese mother exposed her to a variety of cultural experiences.

"Religion, food and family are big parts of African-American life, and my mother passed on to me certain Japanese customs like always taking your shoes off in the house," said Batiste. "I still make people take their shoes off when they enter my house."

Batiste's parents met when her father was stationed with the U.S. Air Force in Japan, and although they divorced when she was seven, she still remembers vividly the time she spent with her mother.

"She would take us to Buddhist prayer meetings, and the children couldn't go into the rooms where they were praying," said Batiste. "Once a week she made us tofu, and also liked to serve squid, octopus and kim-chee, which was too spicy for me. She always made a lot of rice."

Batiste said her African-American heritage is the source of her greatest pride since she has followed in

the footsteps of her father and grandfather by serving in the military.

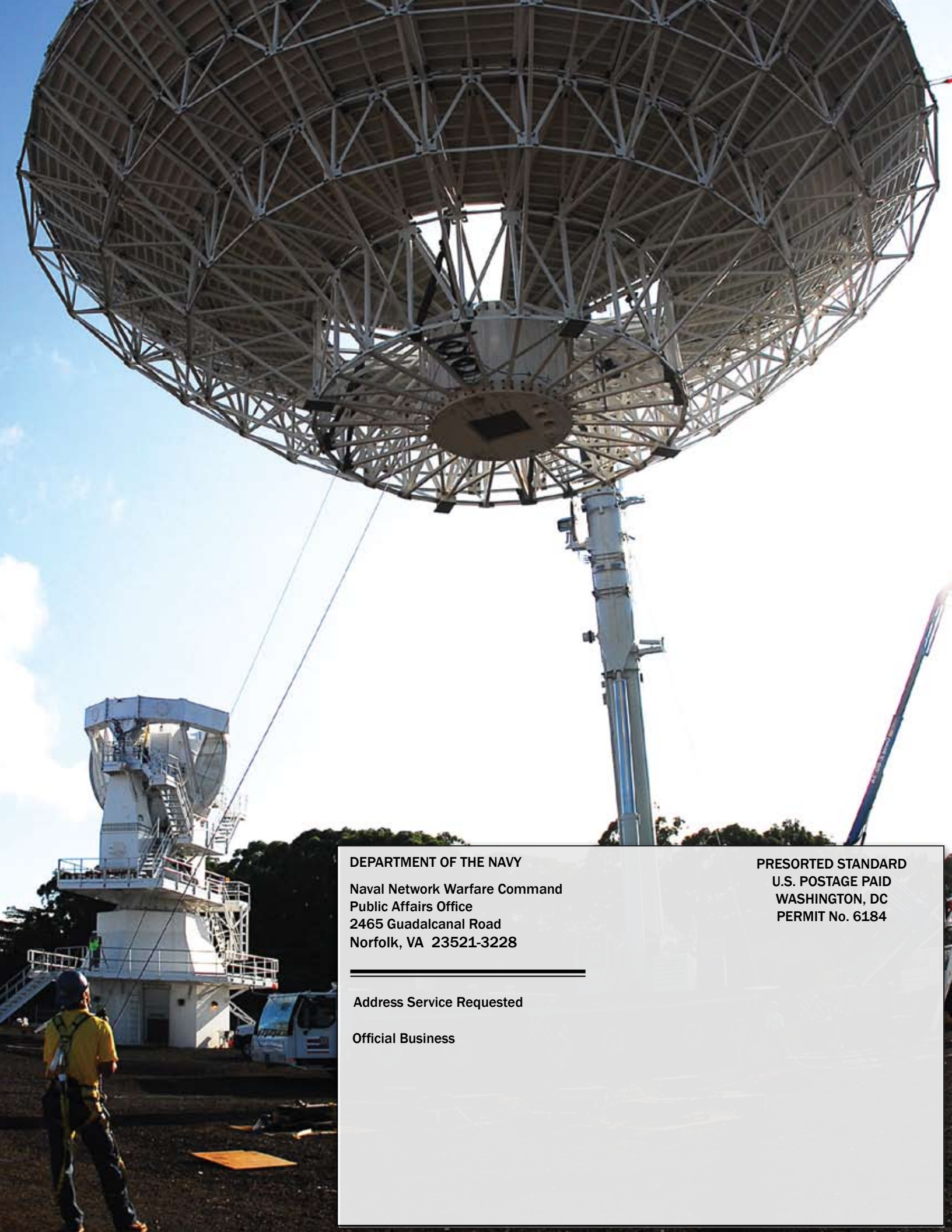
"My father is very proud of the 23 years he spent in the Air Force, and my grandfather served in the Navy during the Korean War. Listening to his stories about his service influenced me to join," she said. "He was the first person I called when I made chief in 2005."

## Upcoming Diversity Conferences

CONFERENCE	LOCATION	DATES	WEBSITE
•Heroes & Heritage (H&H) Student Leadership Summit	San Antonio	19 Mar	<a href="http://www.heroesandheritage.net">www.heroesandheritage.net</a>
•National Society of Black Engineers (NSBE) Convention - 2010 Award Nominations Due: Oct 09	Las Vegas	25-29 Mar	<a href="http://www.nsbe.org">www.nsbe.org</a>
•National Association for Equal Opportunity In Higher Education (NAFEO) Conference	Atlanta	1-4 Apr	<a href="http://www.nafeo.org">www.nafeo.org</a>
•NNWC Diversity Awareness Conference	Norfolk, VA	16-17 Apr	<a href="http://NEWS-Diversity">NEWS - Diversity</a>
•National Japanese American Memorial Foundation (NJAMF) Annual Awards Dinner	Washington	17 Apr	<a href="http://www.njamf.com">www.njamf.com</a>
•Patriots Technology Training Center (PTTC) Youth Summit on Technology	Upper Marlboro, MD	18 Apr	<a href="http://www.patriots-ttc.org">www.patriots-ttc.org</a>
•Association of Naval Services Officers (ANSO) Conference	San Diego	28 Apr-2 May	<a href="http://www.ansomil.org">www.ansomil.org</a>
•National High School Drill Team Championships (NHSDTC)	Daytona, FL	2-4 May	<a href="http://www.thenationals.net/nhsdte.htm">www.thenationals.net/nhsdte.htm</a>
•Federal Asian Pacific American Council (FAPAC) Conference - Award Nominations: Due Mar 09	Houston	11-15 May	<a href="http://www.fapac.org">www.fapac.org</a>
•National Image Inc. (IMAGE) Training Conference - Award Nominations: Due Mar 09	San Antonio	12-17 May	<a href="http://nationalimageinc.org/">http://nationalimageinc.org/</a>
•Society of American Indian Government Employees (SAIGE) National Training Conference - Award Nominations: Due Apr 09	San Diego	1-5 Jun	<a href="http://www.saige.org">www.saige.org</a>
•Annual Women's Leadership Symposium (SSLA) - Award Nominations: Due May 09	Landsdowne, VA	24-26 Jun	<a href="http://www.sealeader.org">www.sealeader.org</a>

**EDITOR'S NOTE:** For more information on NETWARCOM's Diversity Program contact: LCDR Richard A. Borden at (757) 417-6757 x 6 or [richard.a.borden@navy.mil](mailto:richard.a.borden@navy.mil)





**DEPARTMENT OF THE NAVY**

Naval Network Warfare Command  
Public Affairs Office  
2465 Guadalcanal Road  
Norfolk, VA 23521-3228

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